

TODAY'S SCIENCE FICTION — TOMORROW'S FACT

FEB. 25c

# STARTLING *stories*

A THRILLING PUBLICATION



featuring **TROUBLED STAR** a novel by George O. Smith

# CAR OWNERS SHOVE \$10 BILLS IN YOUR POCKET..

When you show them America's greatest  
auto seat cover values!

Including

## BAMBOO

Newest Seat  
Cover Sensation!



### BIG MONEY, FULL OR SPARE TIME!

Want extra money—plenty of it day after day? Then rush your name and address at once for Free Sample Outfit that will start you taking orders from car owners everywhere for Key expertly tailored Auto Seat Covers. EXCLUSIVE NEW PATTERNS to fit every make and model car. No one can compete with you in wide choice, in quality—and in expert tailoring that makes covers fit like a pair of gloves. And when you quote prices that are only a fraction of what the customer expects to pay, brother! You make money hand over fist writing up the fast orders! Line includes nationally advertised sensations like BLACK EBONY Saran, in the new Black and Silver Watermelon Stripe, beautiful beyond description BAMBOO, luxurious, brilliant FIESTA, colorful BULL FIGHTER PLAIDS,

plus many other exclusive patterns to choose from, all at unbelievably low prices. It's no trick at all to make big money whether you sell full time or just in spare time. OPPORTUNITY TO SELL AT WHOLESALE TO GARAGES, SERVICE STATIONS, ETC.

### RUSH NAME FOR FREE OUTFIT

GIVE MAKE, YEAR AND MODEL OF YOUR CAR. No experience needed. Make all the extra money you need easily just by showing! Every car owner a "hot" prospect. YEAR AROUND STEADY PROFITS. No investment to make. Actual seat covers given to producers for OWN use! Write for Free Selling Kit and actual samples TODAY!

**KEY PRODUCTS CORP., Dept. 34-B**  
800 NORTH CLARK STREET CHICAGO 10, ILLINOIS

KEY PRODUCTS CORP.,

Dept. 34-B

800 N. Clark St., Chicago 10, Ill.

Rush Free Sample Outfit at once. (If you own a car include the following information):

Make Year Model

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



FIESTA



BULLFIGHTER



BLACK EBONY

# ARE THESE MISTAKES HOLDING YOU BACK?

If you're not getting ahead as fast as you'd like, check these possible reasons. Find out why you're not a success and what you can do about it.



## YES NO

- ☐ Do you put things off? To get anywhere you have to make a start.
- ☐ Do you really want to succeed? Isn't there something you want enough to work for it? Marriage, a new home, money for your family—all depend on your advancement.
- ☐ Are you unwilling to give up temporary pleasures? Some people think more of a good time now than of promotion and higher pay later on.
- ☐ Are you too lazy to plan ahead? You've got to manage your life, plan for success and stick to it.
- ☐ Are you afraid of responsibility? In a bigger job you'll have to make decisions, ect, be somebody.
- ☐ Are you short on courage? It takes grit and determination to set a course and stick to it.
- ☐ Is your education limited? The good jobs go to men who know—men with sound training in their field. I. C. S. offers you that training.
- ☐ Do you think you can't attend specialized training? College may be too expensive, but home study lets you learn while you learn, at 1/10 the cost.
- ☐ Do you hesitate to find out where to get training? If you shy off from taking the first step, you'll never achieve success.

**One out of three** who read this page and check their shortcomings will do something about it. Two will stay in the rut. One will plan for self-improvement and stay with it till he gets there. Are you the one?

I. C. S. has helped train nearly 6 million men and women for better jobs. Among its 391 courses there's one that can help you succeed. I. C. S. lessons are clear, direct, authoritative. They give you bedrock facts and theory with practical application. Studying at home you can progress at your own speed, have the advantage of individual instruction. Choose the course you need from the list below, and mail the coupon today! We'll send you full information plus free book, "How to Succeed."

## INTERNATIONAL CORRESPONDENCE SCHOOLS



BOX 3276-J, SCRANTON 9, PENNA.

Without cost or obligation, send me "HOW TO SUCCEED" and the booklet about the course BEFORE which I have marked X:

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ART</b><br><input type="checkbox"/> Commercial Art<br><input type="checkbox"/> Magazine and Book Illustrating<br><input type="checkbox"/> Cartooning<br><input type="checkbox"/> Show Card and Sign Lettering<br><input type="checkbox"/> Fashion Illustrating<br><b>AUTOMOTIVE</b><br><input type="checkbox"/> Automobile, Mechanic<br><input type="checkbox"/> Auto-Elec. Technician<br><input type="checkbox"/> Auto Body Rebuilding and Refinishing<br><input type="checkbox"/> Diesel—Gas Engines<br><b>AVIATION</b><br><input type="checkbox"/> Aeronautical Engineering Jr.<br><input type="checkbox"/> Aircraft Engine Mechanic<br><input type="checkbox"/> Airplane Drafting<br><b>BUILDING</b><br><input type="checkbox"/> Architecture<br><input type="checkbox"/> Arch. Drafting<br><input type="checkbox"/> Building Contractor<br><input type="checkbox"/> Estimating<br><input type="checkbox"/> Carpenter and Mill Work<br><input type="checkbox"/> Carpenter Foreman<br><input type="checkbox"/> Reading Blueprints<br><input type="checkbox"/> House Planning<br><input type="checkbox"/> Plumbing | <input type="checkbox"/> Heating<br><input type="checkbox"/> Steam Fitting<br><input type="checkbox"/> Air Conditioning<br><input type="checkbox"/> Electrician<br><b>BUSINESS</b><br><input type="checkbox"/> Business Administration<br><input type="checkbox"/> Certified Public Accountant<br><input type="checkbox"/> Accounting<br><input type="checkbox"/> Bookkeeping<br><input type="checkbox"/> Stenography and Typing<br><input type="checkbox"/> Secretarial<br><input type="checkbox"/> Federal Tax<br><input type="checkbox"/> Business Correspondence<br><input type="checkbox"/> Personnel and Labor Relations<br><input type="checkbox"/> Advertising<br><input type="checkbox"/> Retail Business Management<br><input type="checkbox"/> Managing Small Business<br><input type="checkbox"/> Sales Management<br><input type="checkbox"/> Salesmanship<br><input type="checkbox"/> Traffic Management<br><b>CHEMISTRY</b><br><input type="checkbox"/> Chemical Engineering<br><input type="checkbox"/> Chemistry<br><input type="checkbox"/> Analytical Chemistry<br><input type="checkbox"/> Petroleum—Natl. Gas<br><input type="checkbox"/> Pulp and Paper Making<br><input type="checkbox"/> Plastics | <b>CIVIL, STRUCTURAL ENGINEERING</b><br><input type="checkbox"/> Civil Engineering<br><input type="checkbox"/> Structural Engineering<br><input type="checkbox"/> Surveying and Mapping<br><input type="checkbox"/> Structural Drafting<br><input type="checkbox"/> Highway Engineering<br><input type="checkbox"/> Reading Blueprints<br><input type="checkbox"/> Concrete Construction<br><input type="checkbox"/> Sanitary Engineering<br><b>DRAFTING</b><br><input type="checkbox"/> Aircraft Drafting<br><input type="checkbox"/> Architectural Drafting<br><input type="checkbox"/> Electrical Drafting<br><input type="checkbox"/> Mechanical Drafting<br><input type="checkbox"/> Structural Drafting<br><input type="checkbox"/> Sheet Metal Drafting<br><input type="checkbox"/> Mine Surveying and Drafting<br><input type="checkbox"/> Electrical Engineering<br><input type="checkbox"/> Electrician<br><input type="checkbox"/> Electrical Maintenance<br><input type="checkbox"/> Electrical Drafting<br><input type="checkbox"/> Electric Power and Light<br><input type="checkbox"/> Lineman<br><b>HIGH SCHOOL</b><br><input type="checkbox"/> High School Subjects | <input type="checkbox"/> College Preparatory<br><input type="checkbox"/> Mathematics<br><input type="checkbox"/> Commercial<br><input type="checkbox"/> Good English<br><b>MECHANICAL AND SHOP</b><br><input type="checkbox"/> Mechanical Engineering<br><input type="checkbox"/> Industrial Engineering<br><input type="checkbox"/> Industrial Supervision<br><input type="checkbox"/> Foremanship<br><input type="checkbox"/> Mechanical Drafting<br><input type="checkbox"/> Machine Design Drafting<br><input type="checkbox"/> Machine Shop Practice<br><input type="checkbox"/> Tool Design<br><input type="checkbox"/> Industrial Instrumentation<br><input type="checkbox"/> Machine Shop Inspection<br><input type="checkbox"/> Reading Blueprints<br><input type="checkbox"/> Toolmaking<br><input type="checkbox"/> Gas—Electric Welding<br><input type="checkbox"/> Heat Treatment—Metallurgy<br><input type="checkbox"/> Sheet Metal Work<br><input type="checkbox"/> Sheet Metal Pattern Drafting<br><input type="checkbox"/> Refrigeration<br><b>POWER</b><br><input type="checkbox"/> Combustion Engineering<br><input type="checkbox"/> Diesel—Electric<br><input type="checkbox"/> Electric Light and Power | <input type="checkbox"/> Stationary Steam Engineering<br><input type="checkbox"/> Stationary Fireman<br><b>RADIO, TELEVISION, COMMUNICATIONS</b><br><input type="checkbox"/> General Radio<br><input type="checkbox"/> Radio Operation<br><input type="checkbox"/> Radio Servicing—FM<br><input type="checkbox"/> Television<br><input type="checkbox"/> Electronics<br><input type="checkbox"/> Telephones Work<br><b>RAILROAD</b><br><input type="checkbox"/> Locomotive Engineer<br><input type="checkbox"/> Diesel Locomotive<br><input type="checkbox"/> Air Brakes<br><input type="checkbox"/> Car Inspector<br><input type="checkbox"/> Railroad Administration<br><b>TEXTILE</b><br><input type="checkbox"/> Textile Engineering<br><input type="checkbox"/> Cotton Manufacture<br><input type="checkbox"/> Rayon Manufacture<br><input type="checkbox"/> Woolen Manufacture<br><input type="checkbox"/> Loom Fixing<br><input type="checkbox"/> Finishing and Dyeing<br><input type="checkbox"/> Textile Designing<br><b>HOME ARTS</b><br><input type="checkbox"/> Dressmaking and Designing<br><input type="checkbox"/> Cookery<br><input type="checkbox"/> Tea Room Management |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Name \_\_\_\_\_ Age \_\_\_\_\_ Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Working Hours \_\_\_\_\_ A.M. to \_\_\_\_\_ P.M.

Occupation \_\_\_\_\_

Special tuition rates to members of the Armed Forces. Canadian residents send coupon to International Correspondence Schools Canadian, Ltd., Montreal, Canada

NOW PUBLISHED EVERY MONTH

# STARTLING

*stories*

Vol. 29, No. 1

A THRILLING PUBLICATION

February, 1953

## Featured Novel

### **TROUBLED STAR..... George O. Smith 10**

*They wanted to make a traffic light of Old Sol . . . and they were surprised to get the red light from a green spaceman!*

## A Full-Length Novelet

### **POTEMKIN VILLAGE..... Fletcher Pratt 84**

*The expedition seemed a success, but why did the castaways who landed there always come back . . . in glass caskets?*

## Short Stories

### **THE MONKEY'S FINGERS..... Isaac Asimov 77**

*Let Little Rollo, Cybernetic Simian, solve your problems*

### **DEFINITION..... Damon Knight 117**

*Who'd have the last word, or the last laugh—Man or Kassid?*

## Features

### **THE ETHER VIBRATES..... The Editor 6**

*Featuring a Guest Editorial—by Kendell Foster Crossen*

### **VIDEO-TECHNICS..... Pat Jones 9**

*How on-the-spot news is brought before the viewing public*

### **SESTINA OF THE SPACE ROCKET . . . Philip Jose Farmer 106**

*An illustrated two-page poem by the author of "The Lovers"*

### **CAN MECHANICAL BRAINS**

### **HAVE CONSCIOUSNESS?..... Gotthard Gunther 108**

*An eminent metaphysician discusses our thinking machines*

### **CURRENT FAN PUBLICATIONS..... Jerome Bixby 143**

N. L. PINES, Publisher

FANNY ELLSWORTH, Managing Editor

EDWARD R. ROFHEART, Art Director

SAMUEL MINES, Editor

Cover Painting by  
EMSH

STARTLING STORIES. Published every month by Better Publications, Inc., N. L. Pines, President, at 1125 E. Vaile Ave., Kokomo, Ind. Editorial and executive offices, 10 East 40th St., New York 18, N. Y. Entered as second-class matter at the post office at Kokomo, Ind., under the act of March 3, 1879. Copyright, 1952, by Better Publications, Inc. Subscription (12 issues), \$3.00; single copies, \$1.25; foreign and Canadian postage extra. In corresponding with this magazine please include postal zone number, if any. Manuscripts will not be returned unless accompanied by self-addressed, stamped envelopes and are submitted at the author's risk. Names of all characters used in stories and semi-fiction articles are fictitious. If the name of any living person or existing institution is used, it is a coincidence. February, 1953, issue.

PRINTED IN THE U.S.A.



# RUN THE BEST "SHOE STORE BUSINESS" IN YOUR TOWN!

**Not Just Shoes...  
But SPECIAL KINDS  
OF SHOES!**



## Big Full or Spare Time Profits! Satisfy Customers Most Stores Are Not Able to Take Care Of!

HERE'S THE BUSINESS YOU'VE ALWAYS WANTED! YEAR 'ROUND—REPEAT ORDERS FROM FRIENDS, NEIGHBORS, EVERYBODY—STEADY PROFITS—UNLIMITED PROSPECTS—A QUALITY PRODUCT THAT'S NATIONALLY KNOWN! Start full or spare time with a "shoe store business" in your pocket. No expense of overhead, lights, etc. . . . your big profit is ALL YOURS!

We set you up in this fine business FREE. See how easy it is to make BIG MONEY with Mason's fast-selling shoes for men, women. Wonderful style; extra-comfort features; amazing range of sizes and widths. You feature over 150 styles of dress, sport and work shoes. Sizes from 5 to 16, widths AAAA to EEEE. No wonder no shoe store in your town can compete with you! Make hundreds of extra dollars every month selling specially designed Mason air-cushion service shoes to filling station attendants, garage man, grocers, other people who work in stores, offices, industries. Watch your customer list grow—see how easy it is to earn exciting cash profits when customers RE-ORDER from you.

## EXCLUSIVE FEATURES SELL MASON SHOES QUICKLY FOR YOU!

Mason Shoes are nationally known for extra comfort features. Just hand prospects your Air-Cushion Demonstrator. When they feel the foamy-soft, Velvet-eez Air Cushion they realize how comfortable it is to "Walk on air!" Point out the sturdy steel shank and special Air Cushion Arch Support. Mason Velvet-eez shoes are the only footwear sold direct that bears famed Good Housekeeping Guarantee Seal. Because these fine shoes are NOT sold in stores, people must buy from YOU!

## WE START YOU ON THE WAY TO EXCITING PROFITS FREE!

No need to invest a cent, ever. We send you our Powerful Selling Outfit that has proved to be a real money-maker for thousands of men — FREE! We back you up with National Advertising, proved Sales Aids, even MORE, as soon as you show us you are really interested in making BIG MONEY.



### "TERRIFIC INCOME!"

Edward McCarty of Illinois says: "The day I started to sell Mason Velvet-eez shoes was the luckiest day of my life! My income now is simply terrific!"



# MASON SHOE MFG. CO.

Dept. MA-80  
Chippewa Falls, Wisconsin

**STEEL SAFETY TOE SHOES!**  
The last word in foot safety! You feature Steel Safety Toe shoes in many good-looking styles. Workers want to save feet from injury. Safety Toe shoes help do the job — put EXTRA dollars into your bank account!



### OUTSTANDING LEATHERS!

Imported Australian Kangaroo leather, Calfehin — Lustrous Shell Cordovan — Rugged Hides — actual shoe samples of these fine quality leathers furnished FREE to qualified men!



### NEOPRENE and GRO-CORK SOLES and HEELS!

Work shoes have special features for different occupations. Oil-Resistant Du-Pont Neoprene soles, heels, Gro-Cork Slip-Resistant soles, heels wanted by service station men, garage men, factory workers, thousands in other occupations — help make shoes so fast-selling!



**AIR-CUSHION COMFORT!**  
Foamy-soft Air-Cushion innersole cushions feet on thousands of air bubbles. Customers rave about comfort of "walking on air!" You get actual Air-Cushion demonstrator. Just say "Feel that Cushion." When customers do — they buy!



## SEND TODAY . . . Start Your Own Profitable Business RIGHT AWAY!

Do YOU want to make steady EXTRA money? Do you want real security? Do you want to be able to afford the things you've always dreamed about? — then send this coupon TODAY! We will rush your powerful Free Selling Outfit that features over 150 fast-selling Mason Shoe styles for men and women — Air-Cushion Demonstrator, How-To-Make-Money Booklet, everything you need to make money from the first hour!

## SEND COUPON FOR FREE OUTFIT!

Mr. Ned Mason, Dept. MA-80  
Mason Shoes Mfg. Co.  
Chippewa Falls, Wisconsin  
I want to make really BIG MONEY with Mason shoes! Rush my FREE Selling Outfit so I can start running the best "Shoe Store Business" in my town.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Town \_\_\_\_\_ State \_\_\_\_\_



A Science Fiction Department Featuring Letters from Readers

## GUEST EDITORIAL

By Kendell Foster Crossen

**I**T IS just four years since *Publisher's Weekly* announced that book publishers had suddenly discovered science fiction. This was followed by articles in *Life*, *Time*, *Newsweek*, *McCall's*, *Saturday Review of Literature*, and dozens of other mass circulation magazines, reporting on the new literary phenomenon which would soon push mysteries into limbo and make Westerns as antiquated as the Roman chariot. After years of being a medium in which everybody took in everybody's else's washing, science fiction was practically guaranteed to become the darling of the lending library, pocket-size reprint, and you-too-can-escape set.

Four years later everyone is still busily predicting the science fiction boom, but if you listen closely you'll detect a faint note of hysteria. The big trade houses are publishing a goodly number of science fiction novels, but not all sales meet expectations—only some of them. Many new magazine titles have come into the field. Some have succeeded; others are still looking for the promised boom. The same can

be said to go for science fiction novels and TV. Just putting out science fiction to the public doesn't guarantee dollars in your pocket.

The obvious question is: Why? In motion pictures, radio and TV, nothing is ever obvious except the plot; but in regard to the books and magazines that haven't hit the jackpot, I think the answer is equally obvious. If someone will offer a little soft music to drown out the anguished cries from the bleachers, I will offer two new rules for all writers. If they're followed, I'll practically guarantee a swarm of readers.

1. *Throw the science out of science-fiction. (sic)*

Heresy? Not at all. I like science-fiction; I don't want to see it die out as the natural result of too many years of incest. I think we've been kidding ourselves too long. We're big boys now. It's time we stopped making faces in the bathroom mirror and confusing the emotion with love.

It's usually along about here that someone pops up with the records of the old classics. There's one old American classic which contained eighty-some (I'm too unscientific to walk across the room and check on the exact amount) scientific predictions which have come true. Practically everyone in science fiction has mentioned this at some time or other. I have myself. But no one ever mentions that the book also contained four thousand other sentences, all of them badly written. *Must* we flounder through sixty thousand words of a less than mediocre novel in order to learn that someone guessed we were going to have electronics?

(Continued on page 126)

In just over a year, Ken Crossen has established himself as the writer-more-fans-ask-for-than-any-other. His formula is simplicity itself: he always has something genuine to say.

A former voluminous detective story writer, Ken believes that the whodunit fan is switching to science fiction. He has had a fling at movie, radio and television writing; considers them sheer bedlam, looks forward to a farm in Vermont and a measure of peace writing science fiction. Currently lives on Long Island, possesses a wife, an assortment of children, a beard, and a gift for satire.—The Editor

# WHAT SECRET POWER DID THIS MAN POSSESS?



Benjamin Franklin  
(A Rosicrucian)

**W**HY was this man great? How does anyone—man or woman—achieve greatness? Is it not by mastery of the powers within ourselves?

Know the mysterious world within you! Attune yourself to the wisdom of the ages! Grasp the inner power of your mind! Learn the secrets of a full and peaceful life! Benjamin Franklin—like many other learned and great men and women—was a Rosicrucian. The Rosicrucians (NOT a religious organization) first came to America in 1694. Today, headquarters of the Rosicrucians send over seven million pieces of mail annually to all parts of the world.

*The Rosicrucians*

SAN JOSE • (AMORC) • CALIFORNIA



## THIS BOOK FREE!

Write for YOUR FREE COPY of "The Mastery of Life"—TODAY. No obligation. No salesmen. A non-profit organization. Address: Scribe O.J.S.

## SEND THIS COUPON

Scribe O.J.S.  
THE ROSICRUCIANS (AMORC)  
San Jose, California

Please send me the free book, *The Mastery of Life*, which explains how I may learn to use my faculties and powers of mind.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

ZONE \_\_\_\_\_ STATE \_\_\_\_\_

All the thrills  
of the West . . .  
corralled  
into one  
exciting  
magazine . . .



# Subscribe now to Ranch Romances

16 issues only \$3



Everyone who enjoys hard-hitting stories of the Old West will find a pay-lode of thrills in each exciting issue of RANCH ROMANCES.

Every page of RANCH ROMANCES is branded with the rip-roaring action of frontier days as hard-riding men and their glamorous women recreate the pulse-quickening drama of the untamed West. Here is the roar of blazing guns, the lurking danger of the lonely range, the smashing, surging action that leads to excitement and romance.

Yes, all the thrilling adventure of the wild West is yours when you subscribe to RANCH ROMANCES. And what's more, you'll get it at a big saving . . . because if you were to buy 16 copies individually, they'd cost you \$4.00. But as a subscriber, you get them for only \$3.00—a saving of a full dollar. Think of it—for only \$3, less than the cost of the average book, —you get 16 issues of RANCH ROMANCES . . . more than 2200 pages of hard-hitting, pulse-quickening western reading. And remember, all RANCH ROMANCES stories are brand NEW; there's not a reprint in the entire batch.

So, fill in and mail the coupon below with \$3. Do it right now to make sure you don't miss a single copy of RANCH ROMANCES.

Ranch Romances • Dept. STS-2 • 10 East 40th St. • New York 16, N. Y.

Count me in, Partner! Please enter a subscription to RANCH ROMANCES in my name at the special rate of 16 issues (32 weeks) for only \$3. My remittance is enclosed

Name \_\_\_\_\_

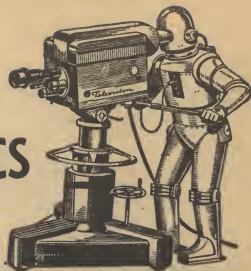
Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

(Add Postage: Canada 50c, Foreign \$1.00)

# VIDEO-TECHNICS

by PAT JONES



**WE'RE NOT** going in for any political rehashing. The elections are over, and for the most part, the fever has subsided. Some of the improvements in tv techniques which brought the election results quickly and accurately before the public will continue to make news.

To get the story, we talked to NBC's Charles H. Colledge. Newsman and engineer combined, "Joe" Colledge works on the theory that news, like ice cream, "is best when it's a scoop."

In getting facts and figures rapidly to the public, two items struck us as being of special interest. One was the way statistics were handled, the other how human interest highlighted the evening.

Special computers were built by the National Cash Register Co. and the American Totalizer Co., each of which had the equivalent of 27 mechanical memories. Thus it was possible to flash up-to-the-minute results of the nation's balloting.

The six unique tabulators broke down the results into states and electoral districts, popular and electoral votes, enabling commentators to analyze trends as fast as they developed.

To secure news scoops of human interest from out of the way sources, 16mm movie cameras were often useful. Having the advantage of complete mobility, only one major drawback had prevented their extensive use: the slowness of ordinary film developing processes.

In conjunction with professors from MIT and two NBC cameramen, Colledge

conceived and constructed a radically new developing unit for preparing 16mm film.

Unlike other film developers used by networks (some of which occupy an entire room) the "hot developer" is contained in a box about half the size of a home refrigerator. Weighing 225 pounds, it is portable, and film can be developed en route from its source.

The unit can turn out 1,220 feet of negative film an hour. Only 67 feet pass over its flock of rollers at a given moment, taking roughly two minutes to develop one minute's worth of film. Though spray developers have been built which are faster, commercial immersion developers of this type are larger, and take almost six times as long to develop film.

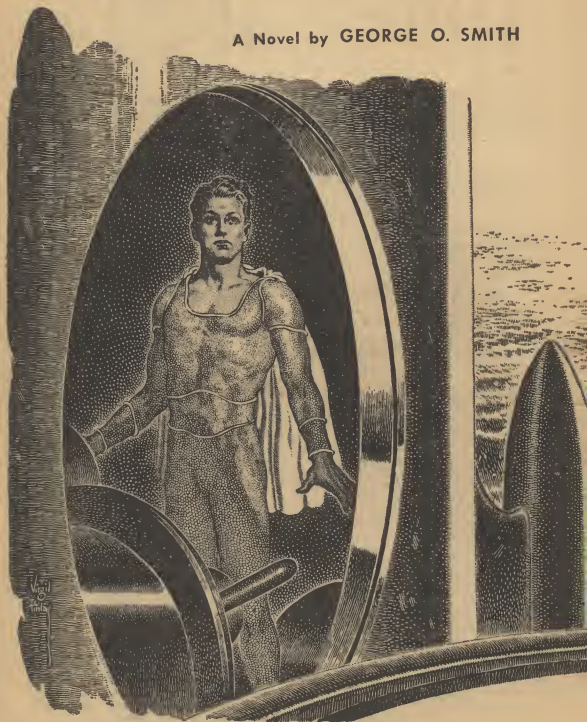
The trick is the developing formula: it utilizes a 20 second developer, a 15 second shortstop (the bath between the developer and the hypo) and a 55 second fixing agent. Operating at room temperature (65'-80'), a thermometer within the machine rigidly regulates its temperature. Plugged into an ordinary wall socket, it operates with or without running water. Film made this way can be aired in 15 minutes.

Having taken every conceivable feature into consideration, the unit was found to have one flaw: ordinary steel disintegrated in the solution. The roller chains in the experimental model had to be greased carefully to keep it in working order!

Future models will eliminate the necessity for elbow grease in getting on-the-spot news scoops to your tv screens.

*They wanted to make a traffic light of Old Sol, but  
they got the red light from a green spaceman*

**A Novel by GEORGE O. SMITH**





# Troubled Star



## FOREWARD—EN SAGA

**A**T LEAST once in every generation there turns up a person who is embarrassing to the Custodians of History. With neither talent nor ambition, nor studious application nor admirable character, this person succeeds where the bright and the studious and the intellectually honest would have failed miserably. Stubborn, egocentric, vain—often stupid—our person blunders in where the wise and the sincere would not dare. His hide is thicker than that of the rhinoc-

eros. He is not abashed to tell the surgeon where to ply his scalpel, or to instruct the statesman on a course of diplomacy. His little knowledge is a dangerous thing—for other people.

His success is due to the law of averages.

History holds many accounts where the brave and the brilliant have stepped in at the right time to avoid disaster. Yet there are more bums than geniuses, more cowards than heroes and more laziness than ambition in our human race, so it is not surprising that there should be occasions when a bum or a self-centered braggart should find that history has a special niche waiting for him.

## I

THEY were parked on the dark side of Mercury, snug and comfortable in their hemisphere of force that kept out the cold and kept in the air. At one side where force met ground, a tall silvery spacecraft rose like a chimney.

They were three:

Chat Honger was tall, red-headed, and thin faced. He looked as though he were incapable of quieting down, but he was really the type of person who has an incredible amount of patience for things which cannot be performed in a hurry.

Bren Fallow was shorter than Chat Honger, darker, stouter, more round of face and more amiable. Definitely, Bren was the methodical type.

The third man was Scyth Radnor. Scyth was the kind of man who is quick to grasp a new idea and as quick to reduce it to practise. His failing was that he seldom looked deep or planned far ahead. Being quick of mind he preferred to play everything by ear because planning required study, and Scyth felt that study for the sake of study consumed too much time—time that could better be spent in the pursuit of fun and games.

Teach them the language and drop them in Greater New York and they would be lost among Manhattan's millions. Better change their clothing, though. Striped shorts, Greek sandals, a

Sam Browne belt across a bare chest, and a Roman toga of iridescent changing hues is not the kind of costume seen on Fifth Avenue.

Aside from their costume they were human to the last detail. Even their speech, when translated, sounded like the human tongue. They used slang, elision, swearwords and poor grammar. They made bum jokes and puns. They sounded more like displaced earthmen than technicians from a culture that had been establishing galactic centers of population for thirty thousand years.

"You're certain?" asked Bren.

Scyth nodded. "Dead certain now. It was that last computation that sold me."

"Then I'd better shut down."

Chat Honger shook his head. "We've got a job to do. We're behind schedule now, fellows, because of this question. We've got a beacon to start here, I say let's get along with it and bedamned to the—"

"You can't," said Bren. "The first time you put down in the log that this is a middle sequence flare-star, right smack-dab in the middle of Yalt Gangrow's Diagram, the Bureau of Colonization is going to ask you if you took a look for habitable planets. Then—then what, Scyth?"

Scyth Radnor shrugged. "The answer is 'yes' we took a look and we found one, just at the right distance, the right size, and the right conditioning. To say nothing of upper atmosphere and other data made by observation. So Planet Three is about as habitable as Marandis itself."

Chat grunted. "Looked for any signs of life?"

Scyth nodded. "The phanobands are as dead as you-know-what. The machinus fields are all as dead as one might expect this far from any established route. There are a few bits and dabs of stuff on the radiomagnetic spectrum which show a recurrent pattern too fast to be anything of natural phenomena, however. I say we ought to take a look."

Chat shook his head slowly. "I didn't expect to find it inhabited. But even knowing it is habitable is—"

Bren said, "If mere habitability is all you're after we can go ahead and establish our beacon and leave Planet Three to be handled later. A beacon wouldn't ruin the planet itself, you know."

Scyth said, "We'd better take a look-see anyhow. That last computation on the radiomagnetic stuff looked too much like man-made radiation to me."

Bren Hallow smiled. "Look," he said slowly, "If this planet is inhabited, how come the Bureau of Colonization doesn't know about it. Not one case in the history of Marandis shows the discovery of an inhabited planet that—"

Chat interrupted, sourly, "that didn't

"If there is a primitive culture of the most low-grade organization there, there will also be one or more leading characters. A man of fame or power—or infame and power—whose person will be in the active minds of a large number of hypothetical inhabitants. We should be able to get some sort of response even if the whole thing is primitive as all get-out. But let's take a look before we do anything that's likely to get us into trouble. We're late now, another few hours isn't going to hurt much more."

The discussion in the dome on Mercury's dark side abated as the trio went to work. Scyth began to tinker with his

## Space Artisan

WHEN all the returns are in, it may turn out that George O. Smith's **HELLFLOWER** stands out as the most popular novel we have ever printed. In a way this is no surprise, since we have before now remarked that space opera, when good, is science fiction at its very purest. And while George might object to use of the word pure, there is no doubt that he is one of the very best artisans in this particular field. Being an engineer helps; it lends a better-than-average solidity to all the gadgets and gimmicks which require inventing in such a story.

You might also be interested to know that in the recent Hayden Planetarium Symposium on Space Travel, George lectured on Space communication—ship-to-ship and ship-to-planet. He shared the program with such figures as Wernher von Braun, Technical Director, U.S. Army Ordnance Guided Missile Development Group, Fritz Haber, of the U.S.A.F. School of Aviation Medicine, Department of Space Medicine, Milton W. Rosen, Director of the Viking Rocket Project, Naval Research Lab and Wally Ley. Quite a company.

—The Editor

stem from Marandian origin. But how about the several cases of spacewreck? Look what we're doing. We're setting up beacons along a rift through the galaxy from Marandis to the Spiral Cluster. We found this rift after years of hard work and galactic surveying and exploring, and both of you know just how fabulous it is. Well, suppose someone found it twenty thousand years ago and got marooned?"

"So what do we do? Take a run to Planet Three and radiate machinus fields all over space? Not until we know. So, Scyth, can you ducky us up a high-sensitivity job out of one of the standard menslators?"

"I think so. D'you think it will work?"

menslators; Chat began to prowl the confines like a caged animal, thinking deeply, and Bren Hallow went back to his massive equipment that was designed to create a galactic beacon.

ON THIS Third Planet of Sol there were still captains and kings and presidents and commissars and a couple of dictators and a new invention or two, all of which professed to be gentle guardians of the public rights. Only the names had changed, some in violence and some in peace. The names of places were about the same; a few had disappeared in the heat of ideology, but by and large things and people persisted despite atoms, politics and the cussedness of human

nature. Youth was still going to hell—and old age was still fuddy-duddy.

One apparant change might have been noticed by a man of the middle of the century, and even he would have expected it.

The history of this change reads like this:

A few years after Global War I, the manufacturer of a breakfast food product known as "Oatflakes" realized a rather monumental increase in the sale of his product. Conscientious investigation showed that this increase was not due to the public becoming addicted to oatmeal as a morning, noon and night diet (with a midnight snack tossed in) but entirely due to a new plaything called the "Wireless." Wireless, it was found, required as a major component about a quarter of a mile of wire wound around the cylindrical box in which the oatflakes were packed.

Some years later, when the first home-manufacture of radio sets slowed because of professional manufacture of commercial radio, the sale of Oatflakes dropped to normal. At this point the manufacturer of the food product realized that the pathway to high sales was not along the contents, but along the package. Let the public buy the stuff for the box, or the box-top. If he wants to eat the stuff on the inside, that's his business!

So in the early-middle years of the century there arose a character called Hopalong Cassidy, who portrayed an Old West chivalry and heroic strength great enough to sell boxtops by the gross ton. He tied-in sales with toy and clothing makers until business reached the Law of Diminishing Returns. After selling spurs for roller skates the brains ran out of ideas and turned to new fields.

Space travel was the coming thing, so the youth of the land turned to Tom Corbett, Space Cadet.

Tom Corbett's only trouble was the same as the difficulty encountered by one Frank Merriwell fifty years earlier. After twenty years, Tom Corbett became the oldest undergraduate in Space Academy, just as Merriwell became the oldest un-

dergraduate at Yale. The youth of the race wanted a real spaceman, full fledged and heroic, and so they got it.

Meet Dusty Britton of The Space Patrol. . . .

The sleek spacecraft landed and the clouds of hot dust rose almost to the spacelock, driven up by the fierce reaction blast. A hundred yards from the Patrol cruiser lay the broken spacecraft of Roger Fulton, arch-fiend, cornered at last.

The spacelock opened and Dusty Britton looked out through a wisp of the deadly radioactive dust. He was clad in the uniform of The Space Patrol: black breeches and dark blue whipcord shirt piped in gold. Calf-length black polished boots. His head was bare, and the collar of his dress shirt was open wide enough to show the fine muscles of his upper chest and shoulders. He was blondish with a wide open face of the type that is associated with laughing-at-danger. His physique was almost marvelous, slender-waisted, broad-shouldered, long-legged, and agile-armed. His arms and hands and face were tanned from the radiations of Outer Space and there were the million little wrinkles about his eyes that were natural, not because of age, but because of the price one pays for being a Spaceman. At his hip swung the secret sidearm of The Space Patrol, a raygun far more deadly than the Colt .45 in the hands of him who knew its use.

Dusty Britton took a step forward to the edge of the spacelock, took a deep breath, and then jumped down into the floating cloud of radioactive dust kicked up by the landing blast. Within seconds he was out of the cloud again and racing across the ground to the ship of Roger Fulton which had landed askew.

His crew appeared in the spacelock and looked down, not daring to drop into that horror, knowing that they were not as fast as Dusty Britton and could not make it through in time to be safe.

**A**CROSS to the wrecked spacer he went, boldly breaching the ruined

spacelock. Along the corridor he went warily until he came to the control room. He kicked the door open and walked in, poised lightly on the balls of his feet, lithe and ready to spring like a stalking cat.

Then Dusty Britton faced his arch-enemy, Roger Fulton. Roger Fulton wore a three-day beard, his clothing was stained and torn and his hair unkempt. Fulton watched Britton with cold, angry eyes.

"Now," said Dusty Britton harshly, "Let's have it, Roger!"

Very slowly and very carefully, Roger Fulton's hands found the buckle of his blaster-belt and unfastened it. He let it drop, putting out a leg so that belt and blaster slid easily to the floor. As it reached his toe, Roger Fulton kicked it to one side. He shook his head and sneered at Dusty Britton.

"I should draw and fight the fastest man in The Space Patrol?" sneered Roger Fulton. "I surrender. You'll never blast an unarmed man, Britton!"

Dusty tossed his head. Keeping one eye on Roger Fulton, Dusty sidled across the control room to where Barbara Crandall was tied to a chair. Her eyes were soft for Dusty as he stripped the gag from her mouth and untied her bonds with his left hand. She sat up, rubbing her wrists and working her mouth, trying to tell Dusty something important that would not come through the cramped muscles.

Dusty turned to Roger Fulton. "I've waited for this moment," he said. Quickly he unbuckled his own blaster and tossed it aside. Then he stalked forward, poised to strike, his hands opening and closing at his sides. "Man to man, Fulton. That is, if there's enough man in you to fight!"

Roger Fulton crowed, "Sucker!" and went into whirlwind action. His hand darted inside his shirt and came out with a tiny miniblast.

There came the throbbing sound of raw energy and a flash that blinded. Yellowish smoke curled out and surrounded the scene. Barbara Crandall

screamed and tried to get to her feet but the hours of being tied had numbed her muscles and she fell back into her chair helplessly. The yellowish cloud billowed higher in the control room and began to thin.

Then out of the cloud walked Dusty Britton. He held his right hand by the wrist, shaking it with his left. "Stunned a bit," he smiled bravely.

"But how—?"

Dusty opened the fingers of his right hand and let a miniblast fall to the floor, its charge gone, its usefulness ended. "He tried the old hidden-gun trick," said Dusty. "But two can play that game. Roger Fulton will never menace honest spacemen again!"

The music swelled as the scene faded out; a cheer from Dusty's crew finished off one more opus of Dusty Britton and The Space Patrol.

It was a special occasion, this showing. It was Noon in New Mexico, but the showing had gone out across a worldwide instantaneous network no matter what time it was at the receiving end. In some places it was late in the morning, in some places early, others had this showing late at night. But people were watching back and forth across the face of the Earth.

The film came to end, there was the white flash, then an intermittent flicker as cross-country synchronization took hold. (This flicker was done with an eye toward the dramatic; worldwide networks could latch in without a wink of the screen anywhere in the world) An announcer came on with the statement that everybody had been waiting for:

"And now we take you to Dusty Britton in person, from White Sands Spaceport in New Mexico!"

A flash and a thundering boom shattered the air and a sonorous voice announced: "X Minus Thirty Minutes!"

**WHITE SANDS SPACEPORT** was a broad flatland, ringed by thousands of people. In the middle stood a three-stage rocket, waiting; its distance making it look like a small model. In

the foreground was a small reviewing stand, and on the stand stood Dusty Britton, resplendent in his Space Patrol uniform. He was extending a hand towards a youngster about twelve, dressed in a miniature Space Patrol uniform, complete with a miniature edition of the famous "Dusty Britton" blaster at his hip.

The lad saluted Dusty; Dusty saluted back.

Then from his shirt pocket Dusty took a small box and an engraved piece of paper.

"Junior Spaceman Harold Dawson, it is my pleasure to award you this Medal of Spaceman's Honor.

"I am informed that upon July Seventeen, at Thirteen Hundred Hours local time, you, Harold Dawson, Spaceman (Jg) full aware of the dangers that threatened, did without thought of your personal safety, wade deep into the shifting sands of Mudlark Lake and from that deadly quicksand return your smaller sister to safety. For valor and for gallantry, I present you with the Order of The Golden Heart!"

With a flourish, Dusty pinned the decoration on the proud youngster's chest. The medal glittered there, a small heart of gold surrounded by rings like those of Saturn, carved in flat relief.

Then with another exchange of salutes, Dusty Britton went down the steps and into a waiting spaceport jeep and while the crowd cheered wildly, Dusty was driven across the sands to the spacecraft.

With tolerant parents permitting their young to watch this live, in-person show no matter what time it was across the earth, it is not hard to believe that during these many minutes there were more people thinking about Dusty Britton than there had ever been people thinking about any other person at any one time in the course of history.

And so Scyth Radnor, tinkering with his menslator on Mercury, trying to tune it to some response that would deliver definitive thought, caught much more than he anticipated. In fact, it nearly overloaded the device.

"Any doubt?" he asked with a twisted smile.

"Nope," from Bren.

"I pass," added Chat.

Scyth said, "So instead of being an uninhabited planet, we have a rather high culture, complete with space travel. This Dusty Britton must be quite a hero. But how in the name of the Great Space can they have space travel without machinus fields or some knowledge of phanoband radiation?"

"Maybe their space travel is—er—"

"Now look, you're not suggesting that people with a Space Patrol are riding ships with tailburners? Rockets? What a horrible thought."

Bren shook his head. "Our forefathers lived through it."

"Not many of them," grunted Scyth.

Chat objected. "Read that history you dislike so much. You'll find that our ancestors went through hundreds of years wallowing across space to the planets in reaction-type spacecraft. Chemico-atomic rockets, if you please."

"Let's stop the argument and get along with the main problem," said Bren. "What are we going to do about them?"

"Well, we can't set up a beacon with them here. So we'll just have to take the proper measures."

"That'll be quite a project. Whole colonies and—"

"That they haven't got yet. They're at the outpost stage; the scientific expedition stage. Their moon has less than a hundred people on it, their Mars has been visited only three times, and their Venus only once previously. This project that Dusty Britton is going on is the second Venus rocket, the first one being sent as an orbital, round-trip manned-job for observational purposes. So we can set up our barytrine field without causing a lot of distress, and then we can go on preparing our space beacon."

Bren nodded and Chat said, "You're the handiest man with menslators and the like, Scyth. You're also the guy that can think fast on his feet. We elect you to go to the Earth and contact this Dusty Britton and explain to him so that he





He was a Hottentot in a power house, a savage in a Plutonium refining plant

can tell his people what is going on."

Bren nodded. "Take the ship and go, Scyth. But use the driver as little as possible. We'd still like to keep this rift secret, you know. We're working for Transgalactic, not the whole damned shipping business."

Not long after, on its secondary drivers which did not radiate enough to make direction-finding much better than haphazard, the spacecraft rose from Mercury and headed toward Earth.

## II

**D**USTY BRITTON entered the lower cabin of the three-stage rocket and flopped into a chair. "Quite a show," he said with a trace of scorn.

Martin Gramer, the producer of the long series of Dusty Britton pictures puffed his cigar and nodded with self-satisfaction. "Not bad," he said. "Not bad at all."

"Gramer, how the hell long is this nonsense going to go on?"

"Until you're ready to retire."

"I'm ready now."

"For good?"

"I could do something else, you know. After all, I am an—"

Martin Gramer eyed the husky young man with derision. "You say 'actor' and I'll blow a gasket," said Gramer.

"Then what the hell am I doing here?" roared Dusty.

"You're here because you have an honest-looking face and a pair of broad shoulders to go with it. You're the living embodiment of John Darling Trueheart, and you can act the part, providing some bright guy lays out the floor plan and coaches you."

Dusty growled, "Why not hire the bright guy?"

"Because he's got a face that would scare children and the physique of an underfed fieldmouse. Pull you out of that hero role you're in and you'd fall so flat on your face that folks would be calling you Old Doormat. Now snap out of it, Dusty, and be glad you've got hold of a good thing. Stop looking for some-

thing you couldn't handle."

Angrily Dusty got up out of his chair. "I suppose you think it's fun to have to go roaming around the country wearing this jazzed-up surveyor's suit with a three-pound chunk of rusty iron clanking on my hip."

"To date they've sold three and a quarter million replicas of that Dusty Britton Blaster you're so contemptuous of, and you've received ten cents for every one that crossed the counter. What's so damned bad about that?"

"I feel silly."

Gramer roared with laughter, then cut it to one short bark as he cooled down to eye Britton angrily. "What's so damned silly about being a model of honor and respect for several million kids?" he demanded.

"Did you ever think how imbecilic it sounds to be Dusty Britton of The Space Patrol, with no space to patrol, wearing a blaster that doesn't blast? And wearing a pack of medals stamped out in the model shop? What does it all add up to?"

Martin Gramer tossed the stump of his cigar at the disposal chute and faced Dusty with a hard expression. "It adds up to a lot, Dusty. It adds up to a damned good living for you. It adds up to—maybe something you're too dumb to understand, but I'll spiel it off anyway—being an ideal. Damn it, man, there's millions of kids in this world that eat, think and dream about the Space Patrol and Dusty Britton. You're an idol as well as an ideal, Dusty. Kids follow a big name man. It's a darned sight better that they follow an ideal rooted in virtue, strength, honesty and chivalry than to have them trying to emulate characters like Shotgun Hal Machin or Joseph Oregon."

"Yeah," drawled Dusty, "But do you know what it means?"

"You tell me your version, Dusty. As if I hadn't heard your gripe before."

**T**HE disgruntled actor took a deep breath, opened his mouth, but then closed it again. He let out most of the blast he was preparing and said, quietly

but disgustedly, "Why waste my breath? Dusty Britton doesn't smoke. Dusty Britton drinks soda pop and milk. The only women in Dusty Britton's life are his aged mother and his younger sister. Dusty Britton's biggest gamble is when he offers to bet a Saturnstone on this or that. Hell's Eternal Fire, Gramer, do you realize that I can't even date a dame for a dance because 'Kids don't care for the mush stuff!' and my private life is not my own? I can't even swear, god-dammit!"

Gramer eyed Dusty cynically. "You seem to get along."

"Sure. I get along. When I shuck this monkey suit and dress like a human being. But you know what happens? When I turn up at some joint, do I get introduced as *The Dusty Britton*? Like hell I do. I'm treated like any of the rest of the dopey tourists. Herded like cattle to the rear seats, while a tomato like Gloria Bayle luses in with her fourth husband and gets the works on the house."

"You make my heart bleed, Dusty."

"Your heart never bled anything but vouchers," snapped Dusty. He fumbled in his hip pocket and pulled out a flask. Gramer did not say a word.

"Well, aren't you going to give me an argument?" demanded Dusty.

"No. You can't be seen."

"But someone's likely to smell bourbon on my breath."

"No one that counts. And by the time we get back—"

Dusty stopped raising the flask in midair. "Get back—?" he roared. "Get back. Look, Gramer—"

"Sit down, Dusty. Take it easy."

"Gramer, what goes on here? You're not suggesting that we take off in this fire-breathing hot water boiler, are you?"

"You've read all the advertisements."

"Yeah, but nobody with sense would take ad-writer's copy for anything but guff."

Outside, a bomb burst with an ear-splitting racket. A stentorian voice thundered, "X Minus Five Minutes!"

"Ye Gods, you're really going through

with this madman's publicity scheme?"

Gramer smiled. "Sure. It's just to Venus; but you can bet your life that every kid that sees this take-off on video or here on the field will be dreaming of the fabulous adventures you'll be having. Those kids *know* this is for real, Dusty."

"Include me elsewhere," mumbled Dusty. He started for the spacelock.

"You can't let those kids down!" roared Gramer.

Dusty paused at the sill of the spacelock. "Gramer," he said cynically, "I'm not letting anybody down. I'm just keeping the hide of Dusty Britton in one unscarred piece."

"But the public—"

"That's what you've got press agents for, Gramer. So you can get your high-priced publicity men to run a few miles of paper explaining how I happen to have left this shooting star four minutes before take-off!"

"Dusty, you're a no-good louse."

"But a whole one. And let me tell you this, Gramer, you're less worried about the state of youthful morals than you are about losing the thread of a good, high-selling series. So I'm going to sail out of here as though I was scared to death of rockets—which I sure as hell am—and you're going to tell some bright explainer to get busy earning the dough you pay him. And when the smoke is all cleared away, I'll be safe and you'll be safe, and Dusty Britton will continue to go rolling along and the box office will continue to come rolling in. Spend a few short months in space? Not while the geegees are running at Hialeah!"

"But Dusty—"

"Space? Bah! Nothing, floating gently from vacuum to void and back again. Not for Dusty Britton!"

Dusty paused long enough to run splayed fingers through his hair and then he headed for the spacelock with a determined step.

"Wait!" roared Gramer.

Dusty paused.

"The least you could do is to go out of here not looking like Dusty Britton.

Don't be an ass! I'll cover for you, but you've got to help!"

"All right but—" Outside another bomb racketed and the amplifier announced laconically, "X Minus Three Minutes!" and startled Dusty with the realization that he did not have much time. "—make it quick!"

"You—there!"

- A technician coming up the ladder looked startled.

"Fifty bucks to swap clothing with Britton, here."

"Done," and the tech started to peel. He balked at Dusty's famous 'Blaster? That's worth another—"

"Another fifty—dammit!" agreed Gramer. "Now, wave out the door while Dusty leaves."

The roar that went up was for their beloved hero waving out of the spacelock, not the tech that came down the ramp with a rush, followed by the portly Martin Gramer. The spacelock swung closed as the spaceport jeep pulled away with Dusty and Gramer in the back.

They were a half mile away when the thunder came. No one even noticed them wending their way through the crowd, for every eye on the field was looking upwards, straining to see the spacecraft that was carrying Dusty Britton and The Space Patrol off to new adventures.

**A**BOUT a hundred miles off the coast of Baja California, Scyth Radnor sat in the control room of the big spacecraft. The dome was awash. Scyth sat high in the dome watching the pleasantly lazy progress of a forty foot schooner that was coming in his direction. It was a pretty sight and Scyth appreciated it even though he had been born on Marandis some thirty thousand years after the sail as a functional device had been outmoded. Sail, to Scyth, was strictly a vacation sort of thing, just as it was to Dusty Britton and a few billion other people whose lives are geared to a timetable except for vacation time.

If there was any puzzlement over this, it was because Scyth's menslator was not following the rocket, now laboring in free

flight towards Venus. Dusty, according to what Scyth had been able to pick up, should have been there instead of here. But Scyth was not the burning inquisitive type. He knew that there was some explanation and that he could afford to wait until it was given instead of wasting a lot of energy trying to figure out the motives of a member of a race unknown to him.

He had better things to contemplate.

In the field of his telescope he could see a sight he approved of.

It was not Dusty Britton, lazing easily near the wheel of the schooner, keeping the helm steady with his left foot because his hands were occupied with a drink on one and a cigarette in the other. It was Barbara Crandall, lying on the cabin on a blanket. Her ankles were crossed and the arch of the upper foot was high and graceful. One thigh, slightly higher than the other, glinted from the sunshine, dark tan. Her breasts pointed at the sky, molded in dazzling white that contrasted sharply against the healthy, animal tan of her flat tummy. There were many more square feet of healthy hide showing than there were of the white shark-skin affair she wore, and Scyth approved of the view.

As he watched her, Dusty drained his drink, tossed his cigarette overboard, and called:

"Hey, Barb! Get us another quart, will you?"

Scyth did not hear it, for his menslator was by no means that competent a device. He just watched and wondered what they were saying.

Barbara called back, "Out of it already?"

"Yeah. I'd get it myself but someone's got to drive this rig."

"Don't mind." She stretched languorously and stood up, stretching high; pulling in her stomach and arching her back with her arms stretched high above her head. Scyth whistled inadvertently as her body went taut against the wisps of dazzling white that crossed her breasts and hips. She came along the cabin top, dropped into the cockpit, and disappeared

into the cabin. She came out a moment later with a bottle which she opened and handed to Dusty. She took the wheel while he poured. They toasted one another. They sat side by side, their shoulders touching.

"Nice," she said quietly.

"You bet."

"Nice, quiet and peaceful."

Dusty addressed his glass and held it high. "Here's to the G. D. Space Patrol."

"What are you supposed to be doing?"

Dusty laughed. "I don't know. I'll find out when we get back. Gramer will have some flanged-up explanation right and ready for me."

"You'd better hope that the G. D. Space Patrol doesn't catch you all at sea with me."

"Phooey," he said. He pursed his lips and Barbara gave him a gentle peck that made Scyth's blood bubble slightly.

"Phooey nothing," she said. "You'd be—er—cashiered. Imagine a member of The Space Patrol consorting with a woman."

"What's good enough for pappy is good enough for me."

Barbara chuckled knowingly. "Where are we heading, if it's of any importance?"

"There's an island dead ahead. We might camp on the beach for the night. It's fine clean sand and—"

"You mean that hummock over there?"

"Hummock—hum— Good Lord!"

THE hummock, dome of Scyth's spacecraft, began to rise out of the sea. Yard after yard it rose, coming upward glistening wet, the sea water running down in rivulets along its sleek flank. Ponderously and inexorably it rose with a steadiness of living rock. Yet it carried the air of feather-lightness, of an untold monster of sheer power held in easy leash. This was no rocket, straining against the formidable pull of gravity; this was a thing above material forces, its engines idling, its control in complete command. Without a second

glimpse it was no spacecraft of Earth.

Up out of the sea it rose until its hundred yards towered above them. The spacelock was just above the waterline when the rising stopped and the alien spacecraft stopped, rock-steady. It was poised on its inexplicable driving forces with the same confident ease that an elevator shows when poised on its cables at the twentieth floor of a building. It stood rock-still and let the ocean waves break against its sleek, polished metal flank.

Whatever it was, Dusty did not like it.

He kicked the auxiliary engine into life, loosed the halyards and let the sails drop. He turned the helm hard as the engine roared into full throat. But the schooner defied its helm and aimed bowsprit-on to the spacelock of the spacecraft, starting through the sea like a dolphin toward the ship of space. The engine raced without bite because the ship was being hauled forward by some unknown force faster than the screw could drive it; the helm shuddered but had no effect, it tried to slue the stern sidewise but only succeeded in making the hull strain out of line. The wheel whipped out of Dusty's hand and spun to dead-ahead.

Dusty left the helm and dived into the cabin. He flipped on his radio and waited with rising panic while the tubes warmed and the meter rose to the red line that meant that it was ripe and ready for use. He grabbed the microphone, flipped the bandswitch to the Coast Guard Frequency, and yelled:

"This is Dusty Britton of the schooner Buccaneer. We are about a hundred miles off the coast of Baja California. Help! We are attacked by an alien spacecraft! Help! This is—"

He let his voice trail off because the output meter dropped abruptly to zero. Something had gone kaput.

### III

DUMBLY frightened at the face of the unknown, Dusty was far more frightened at being confined in the cabin of his schooner than he was of the name-

less horror he would have to face above. He left the cabin in a hurry, and with mental desperation he turned deliberately to face the danger in the hope of getting it over with. He figured there would be less anguish if it came quickly.

The spacelock door was open wide and a man was standing there with a fluted-barrelled thing in his hand. On the deck were droplets of copper still hot enough to send up little wisps of smoke from the deck. The stub end of the antenna was melted down in a blob. As Dusty looked from Scyth Radnor to his ruined antenna and back again, Scyth leaned back in the spacelock and dropped his weapon. Then he made a relaxed show of sitting on the sill of the airlock with his feet dangling almost to the tips of the waves. He looked relaxed and calm and the trace of a smile was on his face; the kind of smile that would open into honest pleasure if he were greeted with the same.

"I am sorry," he said. "I am Scyth Radnor of Marandis. Despite the fact that I was forced to ruin your antenna, I do come on a peaceful mission, Dusty Britton."

"Yeah—" mumbled Dusty stupidly. Barbara was leaning flat against the mast, white-faced under her tan.

"Believe me, Dusty. I mean no harm. I did have to prevent you from broadcasting that which would bring a bad impression of me to your people."

Scyth reached up and pressed a button in the wall of the spacelock above his head. The sill of the spacelock came out abruptly in an extensible runway, carrying Scyth forward over the deck of the Buccaneer. Scyth dropped to the deck and stood facing Dusty with a hand extended.

"What do you want?" stammered Dusty. "And how come you talk our language?"

Scyth pointed to the tiny case slung around his neck. "This is a menslator," he explained. "When used in direct conversation with a man of another tongue, it acts to translate for both parties their meaning. It isn't perfect by any means,

but it does help to make people of different tongues understand one another." Scyth smiled and then said, "For a quick and amusing explanation, observe this." Scyth clicked the switch off and began to speak. His speech was utterly comprehensible to Dusty and Barbara at first, but Scyth clicked the little switch after he had said a few words. They heard Scyth like this:

"*Fa d snall id*, an expression meaning to consign to the region of theological punishment, which when repeated through the menslator becomes 'Go to hell!' See?"

Dusty nodded dumbly. Barbara relaxed slightly.

"Now," said Scyth, "I am from Marandis. Marandis is a planet only a few thousand light years from the Galactic Center, which makes it nearly thirty thousand light years from here. Marandis is the seat of the Galactic Government. Look, Dusty, I came here to explain all this to you. There is a lot to say, and there is a lot you must take on faith until you know all of it. Let's relax. Will you come aboard my ship and have a drink? It's comfortable there and—"

"No!" snapped Dusty.

"Why not?"

"Nobody, but nobody, is going to get me in any space ship," said Dusty positively.

SCYTH eyed Dusty queerly. His thoughts would have been obvious to anybody but Dusty and Barbara. Scyth was trying to justify in his own mind the attitude of a High Brass in The Space Patrol (any space patrol) who would not enter a spacecraft. Scyth finally decided that Dusty's reticence was due to Dusty's suspicious nature. Dusty was unarmed and he was not getting into a spacecraft capable of carrying him across the galaxy, perhaps operated by other members of the crew. There were no other members, but the ship was big enough to have many. Scyth nodded to himself and smiled at Dusty.

"As you prefer. I only repeat that I



mean no harm and I add that the salon inside is pleasant. We can all have a—"

"We've got a drink," blurted Dusty. He turned on his heel and got the quart from the seat by the helm. He stopped to get a third glass. He poured.

Scyth tasted gingerly. "Very smooth," he said. "What is it?"

"Bourbon."

"Bourbon. Tastes like an excellent liquor. Thank you. Now—" Scyth sat down on the edge of the deck with his feet hanging into the cockpit and settled himself for a session. "Dusty, we are here because we are creating a beacon for our galactic spacelanes."

"Beacon?"

Scyth nodded. "You have the insular viewpoint," he remarked. "You can stand at night and point out your destination. But you cannot even see Marandis from here, even with the finest telescope ever built. Stars lie in the way, huge gas fields and nebular clouds block fast direct passage. To chart our course safely past such stellar menaces, we establish beacons at the ends of certain free passages. For instance, Sol lies at the end of a fifteen hundred light year straightaway. From the last beacon we set up. Here at Sol a slight turn in the course is made and there is another straightaway for a thousand light years toward the Spiral Cluster. We—my friends and I—are charting the course through a rather interesting rift from Marandis to the Spiral Cluster. This rift, along which you lie, has been hidden from us for thousands of years. When it is finished it will cut hours from our travel-time."

"And maybe so. But what is a beacon and how do you establish it?"

"Dusty, when a spacecraft is running at fifteen hundred light years per hour, a three-day-variable star winks in the sky ahead like a blinker-light." Scyth chopped his left palm rapidly with the edge of his right hand. "Wink-wink-wink it goes. And the pilot puts his spacecraft point-of-drive on the beacon and holds it there until he passes it and aims to the next. You—"

"Variable star!" blurted Dusty.

"Yes. The three-day variables are used for course markers; the longer variables are used to denote gas fields, nebular dust, and the like, and the still-longer beacons are used to denote places where various well-travelled starlanes meet, cross or merge. It is—"

"Three day variable—" breathed Dusty.

"Yes. In three days Sol will rise ten times its present brightness and fall again to less than one tenth of the present brightness. This is accomplished by creating an atomic instab—"

"My God! How can any race live under such conditions?"

"They cannot. Not unless properly prepared, well taken care of, aware and ready for it."

"Look," snapped Dusty. "Why not go out and use some other star for your damned beacon?"

Scyth shook his head. "If we were gods," he said quietly, "we could park the Galaxy on our desk, pick up a broom-straw and by fitting and trying we could locate the best course through the star fields. But—"

"If you were gods," grunted Dusty bitterly, "you could reach in and move a few stars aside and run your damned channel on a dead line from one end to the other. So why do you use Sol?"

"Because the two straightaway lanes that meet at Sol do not meet at some other star. In one or two cases along this rift the original surveyors provided alternates in case we ran into trouble. But not on this one. No, Dusty, we cannot change our plans."

"But see here—"

"Dusty, you wouldn't stand in the way of Galactic Civilization, would you?"

"You're damn well tootin' I would if it's going to mow me down if I don't."

Scyth said soothingly, "Doubtless you have cases on your Earth where a state highway is surveyed right through someone's home. Tell me, Dusty, what happens then?"

"We buy the property at a fair price so that the family can find another home

of the same value."

"So you don't stand like a barrier in the way of advancement."

"No we don't. But where are we—" Dusty eyed Scyth with a frown. "You're not going to tell me that your gang will migrate the people of Earth to another solar system, lock, stock and barrel?"

"That would be impossible, of course."

Dusty grunted. "So we gotta alternately cook and freeze just so your outfit can run a goddamned traffic pattern through our living room?"

"Well, now, it's not that bad," said Scyth placatingly.

DUSTY did not hear the Marandanian. He was thinking of Los Angeles suffering under the effects of a variable star. Or, rather, he was trying to visualize such a condition. His imagination provided alternating scenes of icy blast and deadly heat, but Dusty's overall technical knowledge was far too meager to offer him even a slight glimpse of the real truth. To merely consider Sol varying about one hundred to one in brightness and warmth every three days was as far as Dusty could go. What would happen to the weather, the general climate, agriculture, and all of the rest were far beyond Dusty.

Even so, the sketchy picture provided Dusty with enough data to say, "Why, we couldn't go on living on Earth at all!"

"Right. Which is why I'm here."

"But you said—"

Scyth smiled confidently. "I'm not here to preside over the death of your part of our human race," he said. "I—"

"Our part of your human race—?" exploded Dusty.

"Of course," said Scyth in a matter-of-fact tone. "So far as we know, human life was first spawned on Marandis. About thirty thousand years ago we became galactic in scope, spreading out, colonizing, expanding, exploring. Many expeditions left home and were lost. But I'll not belabor this any more, just accept my word for the following: nowhere in this galaxy have we found intelligent life that did not spring as an offshoot of mis-

placed Marandanian culture."

"How can you be so damned certain?"

"The easiest way is to check the cross fertility. It has always worked, to date at least," said Scyth, inadvertently letting his eyes slide up and down the very pleasant sight of Barbara Crandall's body. Barbara knew Scyth's contemplative look and she reacted as any uninhibited woman does when some man is measuring her. The deep high breath raised her breasts and flattened her stomach even though she had no great yen toward wanton promiscuity.

"I gather, then, that you and your gang are going to do something about us?" she asked.

"Of course. We have a program for cases like this. Since you cannot live on a planet rotating about a variable star, we'll move Earth to another star of the same classification."

"But—" objected Dusty.

Scyth went on as though he had not been interrupted. "We'll set up a barytrine field around Earth which serves to do two things. A barytrine field cuts the force of gravity that holds Earth to Sol. It also produces a complete stoppage of objective and subjective time within the field. Then with machinus force-fields we'll put Earth in motion towards another star of Sol's general size. In a thousand years you'll come out of the barytrine field and resume your daily lives under the light of a brand-new sun. It's as simple as that."

Dusty eyed Scyth sourly. "Maybe I've got this wrong," he said. "Maybe you think we live a hell of a lot longer than we do. Maybe you live a thousand years and more but we—"

Scyth held up a hand. It was the hand that held the glass, which was empty. Dusty, reacting as he always did to the sight of an empty glass, filled it despite the fact that he felt that Scyth Radnor was a long way from being a friend.

THE visitor from space smiled indulgently. "You miss the point, Dusty," said Scyth, nodding his thanks for the

drink. "I said that the barytrine field produces a complete stasis in time. It will snap on . . . a thousand years will pass . . . it will snap off. To us, we will live and die and never see you again. But for you and yours, if you drop a marble before the field goes on, time will cease for you until the field goes off, and your marble will hit the floor a thousand years from now. You will feel nothing. There will be a tiny flick of light. If you are watching the sun it will probably blink and return slightly off-center because we never can be that precise. If you are watching the stars at night, they will wink out and wink on, and be in a new pattern. You will feel nothing."

"Yes, but, look here, we—"

Scyth smiled again. "Oh, you'll be repaid. We'll raise you from your present primitive level—"

"Primitive?"

Scyth nodded. "Primitive," he said. "You're as primitive to us as your savages are to you."

"But—"

"Look, Dusty, thirty thousand years ago, Marandis was still ahead of your present state of development. I can say this because your people at the present time still have no inkling as to the inconsistencies in the theory of general relativity. Someday soon you will discover that general relativity does not fit all the cases. Then you will propose the machinus theory of space-time. The machinus theory works where relativity does not. Then," glowed Scyth, "you will discover the phanoband carriers which operate in a way as to completely deny relativity in every concept. From there you find the barytrine field forces. But you're still primitive, Dusty."

Dusty eyed the Marandian sourly.

Scyth continued, "You'd find little in common with us," he said. "You'd find that you would have to re-educate yourself before you could even understand us. Why, there are people in our culture who would take advantage of your ignorance."

Dusty nodded. His hazy knowledge of history presented him with a costume

drama of Sir Walter Raleigh handing over a ten, two fives, and four ones to Chief Sitting Bull and receiving in return an engraved bill of sale for the Island of Manhattan. This negotiation was sealed with a slug of liquor out of a bottle labeled 'Bourbon, Bottled in Kentucky.' (Pocahontas, standing to one side, received a string of beads.)

Scyth went on:

"The big problem, Dusty, so far as you are concerned is the preparation of your people. We cannot be precise about the position of the new sun. We could not possibly hope to keep any semblance of your stellar geography. When the barytrine field goes on, it will produce an effect similar to reaching the splice in a reel of film. With no warning, no pain, strain, nor furor the sun will snap slightly aside to its new position. On the night-side the stars will flick instantly to a new pattern. This sort of change would cause great hysteria and fear. Unless the people are prepared for the sudden change. So, Dusty, you as a high official in your Space Patrol must carry our message to your people."

Dusty said, "But—"

"You've mentioned the possibility of payment," said Scyth smoothly. "We expect and intend to pay. But not in money, Dusty. In service and commerce and in many other ways. For instance, we know that your group—I cannot call it your 'race' because your race is ours—must stem from an early expedition and so you are a lost offshoot. As soon as we can, we will come to you with teachers and learned men to help you regain your rightful place as a part of our Galactic Culture."

Dusty looked at Scyth. In his mind churned a hundred objections to the whole thing. He did not like it at all, but he was logical enough to realize that his objections would be waved aside and the Marandians would go on and do as they planned anyway. On the other hand, maybe if Dusty Britton were to take a large hand in this affair and carry it off successfully, Dusty Britton could become a large figure indeed.

"It will be a bit difficult," he said slowly. "People are not going to take to the idea of losing their sky and sun and a thousand years out of the middle of their lives."

"The thousand years are peanuts. Nobody will notice it. The swap in suns is only a sentimental objection. One sun is like the next and we'll see to it that they are as close as can be had. The change in stellar appearance is deplorable, I admit. But it will give you one advantage, Dusty. Like most skies, they are divided off into primitive legendary shapes with neither rhyme nor reason. A cluttered mess. With a fresh start you can make some reason to the constellations. These are the sort of arguments you must use, Dusty. As a final reminder, you must remember that this is what is going to be done. Period. It is necessary and it cannot be stopped. Therefore you and your people should accept it and make the best of it. Therefore, in what will seem like three weeks, you will be by another star, under a strange sky, a thousand years from this moment. And my people will be there waiting to help you on your climb to the pinnacle of culture."

"But now I must go. Take my words back to your leaders, Dusty. You will go down in history; make the best of it!"

As abruptly as that—Scyth Radnor arose from the deck of the Buccaneer, climbed onto his runway, and was drawn back into the big spacecraft. The space-lock closed smoothly and the huge ship rose silently out of the sea and arrowed towards the high blue sky. The only noise was the whistle of its passage through the air above.

**S**CYTH landed beside the bubble on Mercury's dark side not long after. Chat greeted him with a question about his success and Scyth smiled. "Naturally they didn't cotton to it," he said. "No one ever would."

Chat nodded agreement. "They wouldn't stand in the path of advancement, would they?"

Scyth chuckled. "I'm getting to be

something of a diplomat," he said. "Not good, but I think adequate."

"Yes?"

"Sure. First I told them about the beacon and let them ask questions about it to whet their curiosity. Then I explained what the beacon was, which horrified them completely, as it should. Then after letting them cook in their own fright for some time I let them down easy by explaining how we would help to save them. So now there's nothing to do but to finish off the job."

"Right. How long will it take for you to get the barytrine generator set up and ticking?"

"Call it a couple of weeks. I'll have to go back to Marandis for the generator. It may take me a day or two to get it, you know. We'll have to get our license revised, and we'll have to put a bond against the safety of this planet Earth, as they call it. Of course, we'll have lots of time to look for another sun where we can put their planet; we can do that after the beacon is started and they're out of danger-distance."

Bren said, "So the first thing for you to do is to hike back to Marandis and get your barytrine generator."

Chat added, "When you take off from here, be sure you go due North until you're a long way out of line. No use in advertising our position."

"Right. I'll fog-off the course as best I can."

## IV

**W**ITHIN a few minutes after his return to Mercury, Scyth Radnor was on his way back to Marandis to make the final arrangements. He took the long way out of this part of the galaxy and wound his way in an inextricable pattern to confuse any possible competition. Until the through-route was surveyed and the first passage made from end to end, there would be no exclusive franchise; another company might be able to latch onto one open lane on this route and give them competition.

Considered as unimportant was the

fact that Scyth Radnor took along with him the beefed-up menslator that had put him on the mental trail of Dusty Britton. Not that this mattered, the chances were almost perfect that no one of them would have done anything with it anyway now that their problem was settled. At least, not Chat or Bren. Scyth might have played with it in an off moment. He alone had gotten an eyeful of Barbara Crandall, and while Barbara seemed to be Dusty Britton's woman, Scyth might have wondered whether there were any more at home like her.

But Scyth was on his way to the galactic center, out of range of menslators, even the big permanent installations.

Scyth, Chat, and Bren are not to be criticized for leaving a job undone. To them, a mere explanation covered the entire program. They did not expect the natives to understand the complex ramifications of the galactic culture any more than a certain native chief could understand the danger of fishing in Bikini Lagoon some fifty years earlier.

In fact, the three of them might have been highly amused at a primitive culture that had committed the egregious error of placing such a high value on something of no intrinsic value.

But back on Earth, the wires buzzed and the headlines screamed, and a brace of Gramer's press agents were hard put to untangle the mess the Marandianians had started.

From the teletypes of Worldwide Press Service:

UNITED STATES COAST GUARD RADIO TODAY REPORTED A DISTRESS SIGNAL FROM SCHOONER BUCCANEER OFF COAST OF BAJA CALIFORNIA STOP BUCCANEER ATTACKED BY QUOTE ALIEN SPACECRAFT ENDQUOTE STOP USE WITH DISCRETION COMMA BUCCANEER OWNED BY DUSTY BRITTON OF MARTIN GRAMER STUDIOS STOP

An excerpt from the daily column of Garry Granger:

"There is something in the wind that smells like a publicity stunt. Dusty Britton, our Space Patrol type Sir Galahad supposedly took off for the Venus jaunt some three weeks ago, but has succeeded

in sending a distress signal from somewhere off the coast of Southern California. Apparently The Space Patrol is about to meet up with Moby Dick, or possibly it will be "Ten Thousand Leagues Under The Sea" starring Dusty Britton. We would like to know two things: one is whether our intrepid hero actually risked his million dollar neck in a rocket or not, and the second thing is how much hanky-panky the Coast Guard is going to stand for. Some things should be kept sacred. We are not very religious here at the office; but we do believe in the Brotherhood of Man, and somehow we resent bitterly the use of distress signals as a means of getting publicity."

Excerpt from a press release from Martin Gramer Productions, Inc.:

"Now it can be admitted! Dusty Britton has combined fact with fantasy! No longer a mere actor, Dusty Britton was called from the space rocket just a few minutes before take-off time to investigate a secret report of space operations off the coast of Baja California. If Dusty Britton reported an attack, it stands to reason that the secrecy that surrounded the original report is no longer necessary and Dusty Britton's presence on earth instead of in the space rocket can be disclosed. We await more detailed information as to the real nature of—"

From a press-conference held at Arlington, Virginia:

SIGNAL FALSE! SAYS F. C. C.!

"Radar Stations report that no sign of space operations by any agency other than the Venus Rocket have been observed. Even the early warning screen operating along the coast of California and Lower California has nothing to report. The signal of distress is obviously false, and Dusty Britton will be asked to show just cause for emitting such a report."

A statement from the United States Coast Guard:

"Search and rescue squadrons of the Coast Guard were in flight above the schooner Buccaneer within an hour after

the interrupted distress signal from Dusty Britton. The schooner appeared to be in excellent condition and was making its way back towards land when sighted. Radio challenges were ignored but upon flying low, Dusty Britton and an unknown woman were seen waving from the deck. There seemed to be no signs of distress, but a Coast Guard cutter is speeding to the ship and is expected to make contact in the next few hours."

Excerpt from the column of Garry Granger:

"What actor, long noted for his deriding-do and his exemplary behaviour has been in unchaperoned company with a nubile young female in romantic surroundings? In our youth, heroes were only permitted to kiss their horses. We applaud the approach to reality, but then we are no longer a youth."

From the teletypes of *The Worldwide Press*:

"Dusty Britton today arrived in port, bearing a tale of a Galactic Civilization called Marandis. This Galactic Government it seems, intends to move the Earth to another sun because our position interferes with their program of running Galactic Highways back and forth across the trackless wastes of space. Moving Earth is a simple process, according to Dusty Britton. A mere matter of barytrine fields, machinus forces, phanoband carriers, and a general abandonment of the theory of general relativity.

"From the viewpoint of the scientists interviewed following this claim, Dusty Britton may or may not have been reading one of his own scripts. Knowing Dusty Britton of old, we are inclined to call this one: *Manuscript Found In A Bottle* with a deep nod at Edgar Allen Poe for the use of his title.

"Dr. Foster of the Wellmann Observatory suggested that enough of Dusty Britton's story was logical to make it sound good. A race traversing the galaxy at hundreds of light years per hour would find variable stars helpful if used as beacons. But Dr. Foster said that Britton's story was illogically incomplete. If this

outfit has the machinery necessary to move a planet, why not move the stars themselves and create a straightaway passage from one end to the other without curves in the course?"

From The Wall Street Journal:

D' B' ttn Ent' pses-Open 68 Close 43 off 25

Editorial From *The Journal of Temperance*:

"Elsewhere on these pages is an apology for not printing the interview between our science reporter, Miss Agatha Westlake, and Mr. Dusty Britton. The interview was not concluded because Miss Westlake believed that she could detect the fumes of alcohol on Mr. Britton. It is deplorable that the youth of this fair land have put their faith and their future ideals into the character of a man of such despicable hidden leanings. A package of cigarettes was visible on the deck of Mr. Britton's boat and nearby was a small glass of the kind only found in those dens of iniquity, the formal name of which is forbidden to these pages.

"Let us therefore seek a new champion, who will eschew these vices; who will find it more godlike to extend his gracious invitation of vacation time to his youthful admirers instead of a woman of low moral fiber. We feel—"

TIME Magazine, Science Section:

"Dr. Willy Ley, in an interview today in his retirement home in Jackson Heights pointed out that he had always been convinced that the limiting value of the speed of light was a false theory. Therefore Dr. Ley concluded that it was entirely possible that an extra-solar race could have developed interstellar travel.

"My grandson, Gregory, is aboard the Venus Rocket," said Dr. Ley in the rich German accent that seventy five years in New York have not diluted. "I hope to see the day he takes off for Alpha Centauri.

"But I do feel that there is reason to doubt the story offered by Mr. Dusty Britton. Certainly the more intelligent persons of any galactic civilization would be less likely to contact an actor than



scientists or government officials? This story of phanobands, barytrine fields and menslators sounds too much like the fancies of science fiction to me."

Article in *The American Weekly*:

"With heat rays and weapons of unimaginable power the enemies of the Earth will swoop down to—"

From *The Chicago Tribune*:

"Not since the days of King George III has the threat of foreign entanglements been so great—"

From *The Daily Worker*:

"Without a doubt this advanced culture has developed a perfect galactic State, capable of serving all men according to their needs. We feel that a pardonable mistake has been made by their representatives in contacting a man of Dusty Britton's character, and we will wait with open arms the return of the galactic emissaries, who will bring with them the glories of—"

From Mount Palomar:

"Variable stars are of natural origin and can neither be started nor stopped. The theory that such stars are used by a galactic civilization as beacons and celestial stop-lights is utterly fantastic."

From the teletypes of *Worldwide Press*:

"Dusty Britton was arraigned today in Federal Court for having violated the rulings of the Federal Communications Commission and the international rulings of the Havana Conference of 1972. An indictment is expected from the grand jury, still in conference.

"Dusty Britton is charged with having caused the transmission of a false distress signal. He pleaded not guilty at his arraignment and will probably plead not guilty if his case comes to trial. A fine of ten thousand dollars or three years in jail (or both) is the maximum penalty for a conviction. Public sentiment will probably make the maximum sentence mandatory; this is an election year and the Administration is interested in demonstrating that its foremost desire is to serve the public interest."

Press Release from Cosmic Studios:

"The filming of first run of the new

series, *Jack Vandal, Space Rover* was completed here after an extensive eighteen day program. Jack Vandal is patterned after the characters of *The Saint* and *The Lone Ranger*. Unrestricted by the laws that prevent a policeman from performing his moral duty, hated by the underworld, Jack Vandal is to become a Robin Hood of Space. The world premiere will take place at The Palace Theatre, in Greater New York."

Statement from The Office of Scientific Research & Development:

"No evidence has ever been found to corroborate Dusty Britton's statements that radiation phenomena exist which cannot be explained by the application of Maxwell's Equations, and which are not subject to the limitations imposed by the theory of general relativity."

Ruling by the Bureau of Navigation, Marandanian Sector:

"It is hereby granted that a barytrine field be established about the Planet Three of Sol, and that Planet Three shall then be transported and placed in situ near a star of appropriate dimensions. This enactment is to take place at the convenience of the Transgalactic Company with the proviso that no inconvenience take place to the culture of Planet Three. It is ruled herewith that the change in stellar hemispheres and the revision in planetary pattern is of no prime importance to a primitive culture.

"It is further ruled that the loss of approximately one thousand years of direct time in the inhabitant's life is of no importance since contact with the external culture has not taken place, and therefore this loss has no bearing on the primitive culture. At the end of this period of transmittal, investigatory contact will be made to formulate a program of enlightenment which will result in the eventful assimilation of Sol Three into the Grand Galactic Government.

Signed, Sealed, and Delivered  
BuNav, by Direction."

## V

**B**ARBARA CRANDALL opened the door for a quick glance, then opened

it wide. "Oh. It's you!"

Dusty nodded glumly. "Yeah. Surprised?"

Barbara shrugged. "A bit. When did they let you out?"

"This morning."

"Rough?"

"You said it. Was it rough on you?"

"A little, but it's been made up for."

"How come?" asked Dusty looking up.

She smiled quietly. "I've got legs and a figure," she chuckled. "I've been cheesecake all over town as the *Star Girl* and there's talk of my getting a part in the Jack Vandal series over at Cosmic Studios."

"How so? Seems to me that we're both sort of washed up."

Barbara shook her head. "Jack Vandal is a sort of cheerful villain, you know. He takes delight in bumping off the well-protected crook who can't be touched by the law. He's hunted by the police and hated by the underworld—"

"Spare the gruesome details. They haven't changed in a couple of thousand years. How come you're not in the dog house?"

Barbara smiled. "Because the woman in that kind of opus is always a sort of shady lady herself. It wouldn't do to have an innocent virgin for the companion of a buccaneer. So with my slightly tarnished reputation I'm a natural. What happened to you?"

"The lie detector test."

Barbara blinked. "Then didn't that prove your point?"

"I thought it did. But I forgot one thing. Seems that the lie detector, no matter how good, is capable only of showing whether the character is telling a falsehood or not."

Barbara smiled confidently. "So you were telling the truth. Weren't you?"

"Sure," grunted Dusty. "Sure I was. But, quoting what's-his-name in the Bible: 'What is Truth?' One of the court psychologists pointed it out very clearly. If I firmly believe that the moon turned bright purple at ten o'clock last night, under a lie detector I'd be credited with a 'Truth' when I said no. In fact, the damned thing would say that I was telling a lie if I believed that the moon was purple and tried to cover up by saying that it hadn't changed. Follow?"

"So what was the verdict?"

"The verdict was to the effect that I was suffering under some hallucination—possibly induced by alcohol—which led me into this story. Therefore my lie-detector acquittal was valid only to prove that my call for help was, at the time, due to my personal conviction of danger. I was adjudged temporarily incompetent."

"What kind of sentence? They didn't just let you go."

"I've been two weeks in the observa-

## THE ADVENTURES OF

### IT SMELLS GRAND



SMELL A WHIFF—  
IT SMELLS RIGHT JOLLY!

### IT PACKS RIGHT



CUT TO PACK JUST RIGHT, BY BOLLY!

tion ward of the federal looney locker. You see, to prove me guilty, they had to show that I had willfully and maliciously transmitted a false signal, with intent to deceive and/or for some personal reason. Willful tampering of this nature comes out as malicious mischief; malicious tampering becomes a federal offence. Maybe I've got my terms mixed up, but I think you get the idea, anyway. The end-up was this: Dusty Britton was convinced of his personal danger, his emission of a distress signal can not be called malicious. I am no longer the top star I was once—in fact Gramer has cancelled my contract on the moral turpitude clause and the McDougall Office has blackballed me from all productions. So after a couple of weeks of observation at the spin-bin, they let me free with an admonition to leave the stuff alone. Barb, have you got a drink?"

"Sure thing. Look, Dusty, I know what you must think, but please don't ask me to corroborate your story. Not again."

DUSTY nodded soberly. "I won't. The first time I thought we could convince 'em. But not any more, kid. One of us in the mud is enough. We've got to find a new attack."

Barbara handed Dusty a highball which he sipped before he said, "Barbara, we've got to do something."

"Why?"

He looked at her, stunned. "Why?" he cried.

Barbara took a sip of her own highball. "We won't lose a damned thing and you know it," she said quietly.

"A thousand years—"

"So what?" she asked simply. "Supposing that they were a bit more accurate than Scyth predicted. Suppose that they took this thousand years out of our life at a time when you weren't looking at the sun. Do you realize—" Barbara's voice lowered a bit dramatically, "—or have you been watching the night sky to see whether they have already?"

"I have," he admitted with rising excitement.

"All right," she replied complacently. "Then you surely must realize that this thousand years out of your life isn't going to change the stock market a point, or anything else."

Dusty nodded. "This I can realize. But do you think I like losing everything but my other shirt? Do you realize that as of this moment I've got only a couple of thousand bucks tucked away and about as much prospect of landing another job as a dead fly?"

"You're not really worried, are you, Dusty?"

"Why shouldn't I be?"

"Because as soon as this barytrine field

[Turn page]

## UNCLE WALTER

IT SMOKES SWEET



A MERRY SMOKE—*Sir Walter Raleigh!*

IT CAN'T BITE!



SIR WALTER RALEIGH'S BLEND OF CHOICE KENTUCKY BURLEYS IS EXTRA-AGED TO GUARD AGAINST TONGUE BITE. THE LARGE SIZE CANISTER OF SIR WALTER RALEIGH—in a BEAUTIFUL YULETIDE PACKAGE—MAKES THE PERFECT CHRISTMAS GIFT!

goes on and off and we find ourselves around another sun, in another sky, you'll be corroborated."

He looked at her. "Of course—and I've kept my big trap shut, too."

"You've what?"

"Because then think I'd be nuts enough to go around telling people 'Well, if you don't believe me, just wait until next month! do you?'"

"Why not?"

"Because then they'd have carefully kept me on ice until after the big event."

"After which your story would be corroborated and you'd—"

"I'd have nothing," said Dusty sharply. "It's not good enough. Sure, I'd be corroborated, but then I'd be blamed for not being effectual enough to convince people in the first place. I'd be blamed for not being the guy I've been depicting on the stage. I've been Dusty Britton, The Great Hero. But when it comes down to really doing something, I'm Dusty Britton, Liar First Class. Next it is going to be Dusty Britton, Helpless Incompetent. I can't just fold my hands and tell 'em that they can wait and see, and then yelp 'I told you so!' because if there's anything that people hate it's 'I told you so!' characters."

Barbara Crandall looked at Dusty pityingly. "Dusty," she asked softly, "Just what do you hope to accomplish?"

"I hope I'll be able to—"

"No. I know what you want to do. But what I want to know is how."

"There must be some way—" his voice trailed off.

"I can't see it. Scyth has probably gone to Marandis to get his generator. Dusty, do you know where the hell is Marandis?"

"Somewhere towards the galactic center."

"I'm told that the galaxy is a hell of a big place. You've about as much chance of getting there as you have of swimming the Pacific Ocean with one arm tied behind you. Scyth is gone from here so far that it takes light thousands of years to get that far. Hell, Dusty, at this moment, the best resources of all the science of

the Earth and the so-called planetary income couldn't move a housebrick from here to Venus in less than a matter of months. Alpha Centauri is actually no more than a dreamer's symbol so far as we're concerned. In fact, you and I know that Scyth's little friends are somewhere on the dark side of Mercury getting ready to make Sol a variable. We couldn't get there for months and months, and then we'd have a hell of a time locating them, even if we had whatever it might take to get there."

BARBARA thought for a minute and then went on, "And if we could direct the entire Earth, and could call upon anything or anyone, we wouldn't know where to start. What is a phanoband? Why is a barytrine field? Even I know that there are a couple of dozen rather brilliant men who believe that the speed of light is not a limiting velocity, but this is only a conviction, not founded on any experimental evidence. So maybe you've got a firm inner drive to go out and prove yourself. But how in the hell are you going to make headway against a race that considers us primitive?"

"We've got to make contact."

"How? Shall we call Mercury on the phanoband communicators? And what was that intermediary step? The machinus fields? It sounds like double-talk to me."

"It was something about abandoning general relativity for the machinus theory of space-time," said Dusty, bringing into focus all the science fiction he had ever read.

"Got any theories?" asked Barbara pointedly. "Frankly, Dusty, I'd like to help, but I feel too much like a man trying to come all the way from the stone age to the atom bomb in ten days. In order to circumvent their foul plan we've got to abandon a very workable theory in favor of an unknown something called the machinus theory of space-time, and then from that we develop something called phanoband radiation, which produces factors enabling us to reduce the

theory to practise and eventually we take to deep space, find Marandis, and put our case in front of some sort of bureaucratic something-or-other. Can't see it, Dusty."

"So what am I supposed to do?"

"Sit and take it. What else can you do? Darn it, Dusty, you can't fight them, and you aren't in any position to join them. We haven't got the initiation fee, we don't have the address, and we hardly talk the language."

Dusty looked at her sourly. "I'd hoped you'd help," he said unhappily. "You at least know what the score is."

"Dusty, I'd like to help. I do know what the score is. It's hopeless. You're trapped in an awkward position. And like a lot of other people, you are in a position where you can't do a damned thing about it. So you might as well save your high blood pressure and start looking around to see what you can make out of it."

Dusty finished his drink and left. In a trash-can by the alley was a Dusty Britton Blaster, complete with holster and a tin medal for sharpshooting. The school-store across the street was displaying a Jack Vandal mask and a small case containing ten candy cigarettes and a secret compartment suitable for concealing ten-thousand dollar bills lifted from lawless characters who might have used the dough to bribe juries or buy professional gunmen.

Dusty made his way along the street unrecognized.

THE guard at the front gate looked at Dusty with suspicion. Dusty looked back defiantly; for a number of years the guard had practically bowed thrice as Dusty approached, Dusty hoped that the habit of deference was well established.

"Have you a pass, Mr. Britton?"

"Now see here, Sam, I don't need a pass and—"

"Mr. Britton, I've got orders to—"

"Look Sam. Let's not stall. I want in and I'm going to—"

"One minute, Mr. Britton. I'll have

to call."

Dusty grunted. "I want to see Doctor Ross."

"Oh. Well, just a minute."

The guard called, and Dusty could hear the roar of Martin Gramer, "Throw the louse out!"

"Sorry, Mr. Britton. We can't let you in."

"Look, Sam. I've got trouble. You've got trouble. Do you remember your younger days, Sam? When you were the top boy at Graphic Arts?"

"Sure do. Great days, too."

"What happened, Sam?"

The smile faded from Sam's face. "I got too old."

"Sam, all I want is to gab with Dr. Ross for a minute or two. I've got a great idea. And I'll make you a promise, Sam."

"Promise?"

"Sure. I'll promise you that if you let me in right now, and this idea of mine goes through, that I'll see that you get a good bit in anything I'm in. We'll work it up from character actor until you're playing bigger and bigger bits. You can make a comeback, Sam, and I'll help you then if you help me now. How's about it?"

Sam looked through the studio gates for a moment, and the thinking could almost be seen in operation. He had darned little to lose; he could always blame Dusty's entrance on some dreamed-up excuse, and if Dusty's idea worked, he might even be able to take credit for having used some initiative.

"It's a deal, Mr. Britton. But don't forget me."

"I won't."

Dusty went inside, found the main idea-office, and talked himself into the office of Dr. Ross. These hurdles he found less difficult than the front gate; possibly due to the fact that once a man was inside the fence, everyone thought he belonged there.

Doctor Harold Ross greeted Dusty with surprise.

"Dusty! How goes it?"

"Not good. I'm a professional louse."

"How come?"

"Don't you read? Forget it. Look, Doc, you're actually the only scientist I know, so I want to ask a couple of questions."

"I'll try. But let's not lose sight of the fact that I'm not a credited scientist, as you put it. I'm a sort of cockeyed physicist whose job is to see that actors squinting through telescopes see Saturn at the right angle, and that birds looking through spectrosopes don't point at a blue triplet and call it the Sodium D Lines."

"You might be even better than a real physicist of the research kind," said Dusty.

"Thanks for them kind words, Dusty. Flattery will get you nowhere."

"I'm not trying flattery. You've been in this make-believe business for a long time. That's why you might be able to think it out."

"Go on, man. Spill your idea. What do you want me to do?"

"Let's assume that Dusty Britton's wild tale about a man named Scyth Radnor, from Marandis, is right. And that this guy came out of a spacecraft parked in the ocean, sitting on the sill of the spacelock waiting for me. He talked about the death of the general relativity theory in favor of something called the machinus theory of space-time, phanobands, menslators and all sorts of things."

"Yeah? We've been having space warps ever since the days of Jack Williamson."

DUSTY grinned, perhaps for the first time in weeks. "Look," he said. "I know the patter well enough. Doc Smith invented the Bergenholm and Murray Leinster came along with the superdrive and George O. Smith developed the matter transmitter to a fare-thee-well, but all this guff is so much birdfood."

"What are you getting at, Dusty?"

"I wish I had studied a bit more science," said Dusty plaintively. "But dammit, I don't know a microfarad from a polysyllabic neutron. But I'm telling you that my so-called strange fancy is

the God's Truth. Some time in the next couple of weeks the Earth is going to get itself transplanted. You can either help me now or you can come back later and tell me that you're damned sorry you tossed me out. Take it or leave it."

"All right. So maybe I'll take it. I've only a couple of weeks to lose. What do you want me to say?"

"Look, Doc, supposing that you were convinced that interstellar travel is possible; that these phanobands do exist. That this menslator is a commercial instrument. And so on. Take the first premise: faster-than-light travel is a commercial fact due to the development of a theory called the machinus theory of space-time. Can you do a bit of hypothetical theorization?"

"Sure thing. I don't mind. We'll take this on the basis of plenic syllogistics. Our first premise will be that this menslator works as your pal Scyth claims."

"It's Scyth. Not scythe."

"Then as I put it, the menslator produces the mental image that Scyth intends. He will say, for instance: 'A gostak distims the doshes,' and because he means that a professional preparer of comestibles has placed an unstated number of crustaceans under an open flame, you receive this statement of Scyth as: 'The cook broiled some lobsters.' Is that clear?"

"I can follow you," said Dusty. "This much Scyth explained."

"Good. Now let's look at our commonly accepted definition of 'Mechanus'. This means that it works. In other words we have him telling us that their culture has developed a 'workable theory of space-time' which has been taken up after the theory of general relativity displayed a number of gaping holes. So their 'mechanus theory of space-time' is a workable theory."

"And where does this lead us?" asked Dusty.

"Right back into a circle," said Dr. Ross thoughtfully. "Because if they've developed interstellar travel due to considerations brought about by the mechanus theory, that means that they have



proved their theory by practise."

Dusty grunted half-humorously. "Isn't this like saying that mud is sticky because it's gooey? Or that winter is cold because of a lack of heat?"

Ross nodded. "Or that things fall because of the law of gravity."

"But aren't all these things a case of defining 'A' in terms of 'A'?"

"What isn't?" demanded Dr. Ross. "You're not looking for the Universal Truth, are you?"

"No, but—"

"Look, Dusty, the reason that we can afford to accept the fact that one and one adds up to two is simply due to the fact that one and one adds up to two in a great majority of cases."

"Wait a minute, Doc. One and one is always two."

"Not when you add a quart of alcohol to a quart of water. One and one here adds up to about one point eight."

Dusty waved a hand. "That's different."

"Not by a long shot, Dusty. There are extenuating circumstances. But this is just a proof of the fact that one and one is not always two."

"All right. But where does this leave us?"

"In the same damned circle. Granting that your observations are correct, proper, and unwarped by the addition of bourbon, Scyth and his galactic civilization have developed faster-than-light travel which has resulted in the establishment of a galactic government. But the explanation of how it is done cannot be derived from the nomenclature of the theory. Frankly, I have not the faintest idea of how to go about unravelling the word 'phanoband' unless we take it apart from its roots. Let's see, now."

**B**ROWS furrowed and lips pursed, the physicist thought for a long time and then looked apologetically at Dusty.

"I may be off the beam, Dusty, but I have a notion that your own mind put it together this way: Phan probably pertains to the roots of phantom, or unreal, or ghostly, or what is commonly referred

to as the 'supernatural.' The so-called supernatural is invariably a phenomenon which cannot be explained by commonly accepted academic theory or empirical practise, mostly because the folks who work with it have neither academic nor empirical data. Incidentally, the 'o' part of this first phase is undoubtedly a conjunctive vowel stuffed into the word so that it can be uttered without losing a couple of front teeth or blowing a vocal fuse, or maybe spraying the listener like a professional German lecturer. So let's accept the concept of 'Phan' as something that you cannot explain in common terms."

"Go on, Doc. You're reducing my case to an absurdity, you know."

"I'm sorry, Dusty, but that's how I see it. Now, let's take the 'Band' part of the word. As a disciple of Maxwell, et al, I am hopelessly incapable of concocting a workable theory of radiation which has nothing to do with some basic concept of frequency. Frequency, when you sit down and start analyzing it, is a nice, stable idea that explains a hell of a lot, Dusty, and as you get into atomics you find that particle radiation can be mathematically reduced to terms of frequency. You can actually compute the equivalent frequency of a thrown baseball or a .22 rifle bullet, you know. Then we get to that high-flung miracle we call 'resonance' and God protect me from having to deliver a thirty-minute explanation of resonance."

"I won't ask you to, Doc. But aren't you getting involved in your own traps?"

"Yes, I am. And I'm sorry. But I can't help it. But you can follow my fumbblings, Dusty. In the first place the radiation is not understood, which explains your accepting the mental concept as 'Phano' and because the physics of the radiation must be other than electromagnetic—which would call for the menslation into 'spectrum' the somewhat ambiguous term 'band' is assigned in your mental concept of the idea. So the literal menslation of the word is: 'Unknown mode of radiation' which—"

"But where are we getting, Doc?"

"That's what I was approaching, Dusty. This harangue boils down to the following: these people have a form or type of energy level which is completely inexplicable to terrestrial science at the present state of the art. Their terms, when menslated into our level of appreciation, come out as 'something that works' and 'something that cannot be defined' which, after all, is like trying to explain to a savage why a hunk of black rock always turns toward one direction."

"Hell!"

THE doctor continued. "Sure. It's hell. Even your own term 'menslator' which I've picked up as a fine concept is only your own feeble transliteration of the definition. It does not carry any of the basic theory. So the fantastic gizmo merely aids in the conveying of an idea from one mind to another, despite the fact that the two minds place different values upon the definition of words."

"But this isn't what I'm getting at, Doc. What I want to know is: granting the possibility of faster-than-light velocities, what have we got to explain it?"

"Nothing. Nothing but your own statements that you believe that this is possible and that someone has done it. None of us have any evidence that it is possible, except you. And I am afraid that I must question your training as a scientific observer."

"But, Doc, I—"

"Let's face it, Dusty. You swing about as much weight in scientific circles as Suzy Richtmeyer, voted last year as Miss Alphanon, parked on the Caltech boohucky showing about three yards of shapely nylon and thirty-two well-polished teeth. She was gorgeous but ill-educated, Dusty. She wasn't afraid of getting sterile in a radiation lab. She was afraid of getting pregnant. But if you sit there and ask me how anybody could possibly make any sound and workable theory out of what you describe, I can't see it."

"Look, Doc, maybe I can't deliver much. But they were there and that's what the guy told me."

"There's only one hope, Dusty."

Dusty Britton looked at Dr. Ross; with a voice of determination he said, "Doc, if there's any hope, let me know how?"

"You've claimed that this galactic gang have some humanitarian instincts. They aren't just going to set fire to good old Sol and let us alternately fry and freeze."

"Stop kidding me."

"Maybe I'm not kidding. I'm still promulgating on your own cockeyed plenum."

"You're not giving me much—"

Dr. Ross sat back confidently. "No, dammit, I can't say that I give much credit to your cockeyed story, Dusty."

"Now see here—"

"Now you see here," snapped the physicist sternly, "I won't deny that anything is possible. But I am a firm believer in the law of least reaction, and I think that this covers the case. If this character Scyth is at all concerned about our welfare—still granting that he does exist elsewhere but in your own mind—then get this, Dusty Britton: he will be back to see how you've made out in your program of preparing people for the big change before he turns on this barytrine generator."

Dusty eyed Dr. Ross sourly. "And what is your explanation of that word?"

"Easy, and it means no more than anything else when it is what you call menslated. 'Bary' stems from the root 'heavy' as in 'barytone' referring to something of heavy voice or highly accented. 'Trine' refers to something threefold in astronomical or—er—astrological (haruumpf) meaning. My God, Dusty, the word itself pertains to something as three-times-as-heavy. You don't expect me—or any other scientist—to come up with something sensible from a bunch of half-baked definitions, do you? All you've given me so far is a workable theory, an unknown medium of radiation, and something that is three-times-heavy. Tell you what, chum. Bring me your Scyth Radnor and introduce me. I know guys who would analyze MacBeth's three witches'

brew if they could get a microgram sample. But not from that gobble-gabble about the 'fillet of a fenny snake, in the cauldron boil & bake!' line out of Shakespeare." The physicist went on in an undertone, "Eye of frog and tongue of newt," until Dusty stood up and prepared to leave.

## VI

SCYTH RADNOR was pleased with himself. The trip had gone well. He was back on Earth and the barytrine generator was running in the warm-up cycle, building its field to the magnitude necessary for synchronization to the fabric of space stress caused by the planet Earth. It had not been difficult to maneuver himself into this position of having to run the barytrine generator and in doing so turn up with a few days of vacation.

He surveyed himself in the mirror and nodded. Then he left the big spacecraft and embarked on an errand that looked very interesting indeed.

Eventually, with no adventure worth reporting, Scyth found himself standing before a door pressing on a button.

Barbara Crandall cracked the door an inch or so and peered out. "Yes?" she asked. Barbara was not expecting any visitors, and her natural reaction was to open the door only a few inches until she determined the person making the call. But the sight of this man in faultless whites caused her to open the door a full two feet.

"Miss Crandall, I—"

"I don't think I—"

Scyth chuckled again. "Barbara, may I call you Barbara?"

"Oh, now see here—"

"You don't know me?" demanded Scyth with a hurt expression.

"Should I?"

Barbara was beginning to doubt this parley as a program of good sense. As a stage personality, even though far from a universal popularity, she knew very well that a completely dull heart frequently beat lustily beneath an expensive exterior and that a clear, open, friendly

face often went with a mind fit only for the company of scorpions.

He saw her doubt and decided that he had played this guessing game long enough. "Barbara Crandall, I know you don't recognize me in these clothes and in this surrounding. Our last meeting was under a rather strange circumstance. I am Scyth Radnor, the Marandanian."

"Scyth Radnor!" she exclaimed. "I—yes, it is. I'm sorry, Scyth. I did not recognize you in human clothing."

"Please," he parried, "Don't say it that way. I am as human as you are."

Barbara looked at him defensively. "And you're here to prove it?"

Scyth blinked. She was rather distractingly direct. "There is no suitable answer to that," he said. "Must I supply one?"

Barbara laughed. "Come in, Scyth. Let me offer you the hospitality of a drink."

"Pleased," he said, following her into the living room. She waved him into a chair and turned towards the kitchen.

When she came back with two highballs, Scyth was relaxed in the loveseat. Barbara noted it with inward amusement and handed him the drink without comment. Scyth sipped the drink first and then took a deep and appreciative drink.

"You do have something to offer," he said, not showing his disappointment that Barbara had seated herself in the chair instead of on the loveseat beside him.

"That," she said, "makes two items, doesn't it, Scyth?"

Scyth knew that he had lost the initiative; Barbara was way ahead of him. He tried another tack:

"I came to see how you are making out," he said.

"I'm not doing badly."

"Is the public aware of the impending event?"

"Aware, but not believing. Dusty Britton lost his shirt over this."

"He'll get it back," said Scyth. "I'm not concerned over the result. It's happened before and it will probably happen again."

"It's more than possible that Dusty will be vindicated but will then be blamed for not doing something about it," said Barbara.

"That cannot be helped. Dusty couldn't do anything about it, you know. And if Dusty loses out in the long run, we can't permit the well-being of one lonely man to stand in the way of galactic progress."

BARBARA smiled confidently, but with a slightly sour twist to her pretty lips; it led Scyth to think that there was some derision in her mind. She confirmed it by saying, "Scyth, since you are going on with your program no matter what happens, and your concern about warning the people has worked no matter what happens to Dusty Britton, why do your bother coming back for a look-see?"

Scyth squirmed uncomfortably. Despite certain jokes to the contrary, it is not acceptable to confront a desirable young lady of barely speaking acquaintance and flatly state the delicate proposition. The difficulty here was that no matter how he tried, Barbara Crandall was turning the trend of conversation right back onto the old original trail.

"You're an actress," he said.

"So I'm told."

Scyth smiled. "You're popular? You are in demand here?"

"I am on my way up," she said.

"Barbara, you could be a popular actress, you know."

"Someday I shall be. But this does not come overnight, Scyth. It takes work, you know."

"I have an idea that the flavor of the foreign often helps."

"This is true."

"Then I have a suggestion. Why not come along with us back to Marandis? You have youth and beauty and ability and also the exotic flavor. It—"

"What shall I be?" she returned quietly. "The ignorant but beautiful barbarian? A clothes horse slightly incapable of holding an intelligent conversation? This seldom works, Scyth. I've

studied history a bit and I recall the case of a native girl called Pocahontas who was carried from her native surroundings into the height of the civilization for the time. She was no actress—she was *exhibited* like a pet monkey or a rare zoological specimen. She died of what they called heartbreak. I think heartbreak in this case was a combination of loneliness, of facing the realization that she could never really belong to the culture, of the futility of asking to be returned to her people. In other words Pocahontas lost the will to live. So thank you, Scyth, but I have no desire to be a chattel, or a curiosity . . . Or a museum-piece."

Scyth nodded seriously. "I see your point. But I don't agree with you. In the first place you are indulging in a conversation with me. In the second place, you—"

"In the first place," said Barbara pointedly, "this conversation is being carefully kept on my level, isn't it?"

"I wouldn't say that."

"Of course not. But look, Scyth, aren't you using that menslator of yours?"

"Of course."

"Then the menslator keeps the conversation down to my level because by its very nature it cannot convey an idea to me that is beyond my understanding. Am I correct?"

"In a sense, yes. But—"

"Scyth, can you menslate a dog, for instance?"

"A dog has so little mind that—"

Barbara interrupted this with a wave of her hand. "So how long would it be before you and your people became damned sick and tired of talking down? It would be like trying to conduct an adult discussion in baby talk, wouldn't it?"

Scyth shook his head. "Not entirely," he said. "It might be that way at first. But this would not last. I don't know of your history, but I assume that your Pocahontas was a true savage. You had nothing like the menslator. Doubtless she never learned any real language and so lacked the ability to use a language

of any kind, let alone learn the ramifications of the culture behind it. You would be on an entirely different plane. You have a language and a culture and you are quick to grasp a new idea. With a menslator you would learn the language well enough in a short time and while the deeper factors of the culture would always escape you, the superficial parts would eventually come easy."

FOR an answer, Barbara pointed to the wall. "Scyth, on that wall is a painting given to me by a character who calls himself an artist. Take a gander."

Scyth looked. The painting was a mess of squiggles and blots of color. It was iridescent here and drab there, soft lines elsewhere and sharp contrasts somewhere else.

"Interesting," said Scyth. "What is it?"

"I'm not sure. I think that this is the painting, but all it needs is a hole in one corner and it could be the palette that the guy used to make the painting."

"This is apropos of what?"

"Frankly, I think it is a mess. It is something that could be accomplished by a monkey turned loose in a paint store. But the artist calls it 'modern' and defends his stand by stating that anybody who criticises it is wayward, ignorant and unappreciative of the finer moods and things of life. So put me in your culture and turn me loose. If I criticise it will be because I am too primitive to understand these higher bits of culture. If I enjoy something, I am looked down upon because I can't really feel the true depth of the thing. It—"

Scyth held up a hand and his empty glass at the same time. Barbara laughed and went to give him a refill. It also gave him time to think, and when she came back with his highball he had the answer.

"Barbara," he said sincerely, "a lot of what you say is true. But look at it this way. You will be a celebrity. You will, to all intents and purposes, be among your own kind. That helps. So you can't follow the deeper arguments nor appre-

ciate the complexities of society as we know them. But think of what you *can* see and enjoy which will be forever denied you if you refuse my offer."

"For instance?"

"Imagine the beauty of a planet under a double sun. Imagine if you can the beauty of a night sky with a ringed moon glowing soft over the landscape. Coalestis is a planet where most of the minerals and rocks combine into black stuff. Imagine the beauty of a city of polished ebony. There is the twinworlds we call Venago One and Two. The Venagos are separated only by about a hundred thousand miles and in the night sky you can look up and see the other world glowing over a quarter of the heaven, and on the dark side are the winking beauties of the cities glowing like jewels. You will see worlds where the vegetation grows lush; riotous colors to hundreds of feet tall and there are cold planets where the ice and snow are always dazzling white. You will wear sheer shimmering cloth so soft that you have no word to describe it. You will wear jewels that glow with their own internal light. Money and luxury will be yours, to travel as you see fit; to spend the rest of your life flitting from star to star, seeing the varied wonders of the universe. That is the fate of an actress in our culture, Barbara, for Lord knows we have few enough of them."

Barbara looked at Scyth seriously. A number of things occurred to her, and one of them was simple. If Scyth had returned to earth to see her, it was obvious that she measured up well against the women of Marandis. Another factor was the yearning to travel. Barbara would not have recognized the train of thought if it had been labelled and explained, but it was there none the less. This was her one chance to see the greener grass on the other side of the galaxy, the chance to realize a human dream of countless centuries.

She smiled wanly.

"You see what I mean?" asked Scyth.

"I think I do."

"Doubts?"

"Yes. I feel as though I'll be abandoning my own kind."

Scyth had been leaning forward on the loveseat. Now he came forward to cross the room. He leaned down, took her hands, and lifted her out of her chair.

"You'll come?"

"You make it very attractive."

"You can do nothing by staying, Barbara."

"But—"

Scyth freed one hand and fished in his jacket pocket. He came up with a small box, deftly flipping the cover up with his thumbnail.

**C**OILED inside the box was a chain of tiny-linked metal that glowed gently with a pale green light. Against the dark cloth of the box lining was a scrollwork of dark metal, the setting for a stone about a half inch in diameter. The stone itself was cut in many facets each of which glowed in a dazzle of a different color. Scyth moved the box gently and the facets changed color and sent flecks of polychrome dancing against the ceiling, the walls, the floor. Flecks of light caressed his face and sparkled into her eyes.

Barbara took a deep breath, then held it, completely entranced by the bauble for which she had no words to describe. It was sheer beauty and she knew that anything that she said would be completely inadequate.

Scyth freed his other hand and took the pendant by the chain. Holding it by both ends, he held it up to her throat.

Barbara stood immobile as Scyth put his hands to the back of her neck and fastened the clasp. Deliberately he let the tiny links slide down across her shoulders, let the chill of the cold jewel-stone thrill her as it slipped down her chest towards the hollow between her breasts.

Then, gently, Scyth took her by the shoulders and turned her to face the mirror on the door. She turned under his hands as though she had no will of her own, to look into the mirror and gasp at the rich beauty of the gem.

Scyth drew her back against him and

she leaned gently with her forehead against his chin. He put his hands on her waist and she covered them with hers, squeezing them as she drew his arms close around her. She tilted her head back and turned her face to offer her lips and he found them warm and soft. His hands caressed her. Barbara turned in his arms to face him and he held her close.

## VII

**T**HE snick of a key in the lock did not break through their preoccupation with one another, but the cynical voice of Dusty Britton came as the shock of a bucket of cold water:

"Very pleasant scene," he drawled. "I hope I've interrupted something."

Scyth and Barbara parted in a whirl.

Scyth felt a sinking sensation in his middle as he realized that the facts were far too clear; that the sensible course was a hasty retreat, but the only path was barred by Dusty Britton.

Barbara took the woman's course. "Don't you ever use the doorbell?" she asked icily.

Dusty smiled sourly. "I always have," he said. "Up to now. But this time I want words with the gentleman in question instead of losing him out through the back door."

"I think I should explain," said Scyth uncertainly.

Dusty chuckled. "What sort of explanation do you think I'll accept?" he asked the Marandanian.

"But I—"

"Stow it, Scyth. You couldn't explain a thing and you know it."

Barbara snorted angrily. "See here, Dusty, you can't come in here and start—"

"I'm not starting anything. I'm just seeking a conference with Scyth."

"How did you know?" asked the Marandanian uncertainly.

"By being just smart enough to find a tomcat by knowing where the tomcat is likely to prowl."

"Meaning?" demanded Barbara icily.



Dusty ignored her. To Scyth he said, "I don't know beans about barytrine fields or generators, but I guessed that you'd set it up on earth somewhere, start it cooking, and wetnurse it until it came to a boil. That would leave you on Earth with time to kill. Since time hangs heavy, you'd probably look up one of the only two people you know. The more attractive one, Scyth. So I've been haunting the front door like a private eye."

Barbara coughed. "You took that right out of *The Space Patrol Fights The Overlords of Delgon*."

"So I've got good writers," grinned Dusty.

"What do you intend to do?" asked Scyth nervously.

Dusty faced Scyth. Dusty topped the Marandanian by perhaps an inch or two and covered him by a good twenty pounds. He guessed that if it came to roughhouse he would probably win. He poised himself on the balls of his feet, just in case. He had no way of guessing the speed or power of the wiry-looking Scyth Radnor and so he was taking no chances.

"I became a professional bum because of you and your phanobands and your menslators and your barytrine fields," he said bluntly. "I was laughed out of everything I had. So now you're going to go with me and tell 'em all that I was right. We'll have the big domes out to take a look at your spacecraft, have 'em inspect your barytrine doodad, take a gander at whatever it is you call phanobands, and so on."

Scyth understood all too well. He was trapped, faced by a man who could take him apart bit by bit without much trouble, and if he came out of it alive, he would end up by being a bigger bum than Dusty Britton had become. Scyth had fumbled badly by taking time off for fun and games with Barbara and he knew it. The only thing to do was to clear out of here no matter what happened afterwards. For once the barytrine field snapped on, any evidence of Scyth Radnor's attempt at dalliance could not come

to light for a thousand years.

His hand lifted slowly to the inside pocket of his jacket as he said, "I'll be glad to help you, Dusty. Naturally, none of us have any notion of making things tough for anybody. So—"

Scyth went into whirlwind motion. His hand came out from inside the coat carrying a fluted-barrelled weapon. As the end of the thing cleared the lapel of Scyth's jacket he was fingering the trigger and a pale emanence seared out and cut down and over in a slashing arc.

**B**UT at the whirl of action, Dusty's hand arrowed into the space between the lower two buttons of his dress shirt and came out with a snub-nosed automatic.

The pale slash of Scyth's weapon was blotted out by the flash and racket of a shot.

Scyth whirled, flinging his weapon against the wall from an outstretched hand. The thing hit with a crunching sound and Scyth continued to turn on rubbery legs, sinking and sinking and turning until he sat heavily on the floor. He sat, stunned, just long enough to fold his hands over his belly. Then he folded forward over them and rolled around sideways as if falling out of his own lap. He half-rolled and fell a-sprawl on his face. A spread of blood stained the white carpet.

Dusty looked down at Scyth. He looked from Scyth to the snub-nosed gun in his hand and swallowed heavily. The gun dropped to the floor with a muffled thud from nerveless fingers; Dusty looked at Barbara out of far-away eyes and said, "He—er—I—"

Then he slid to the floor in a dead faint.

Barbara stifled a scream. The whole thing had been lightning-fast, but she had caught most of it. Scyth had shot first but now he was bleeding on her carpet. Dusty had shot second and was lying in a dead faint. Hysteria choked up in her but she drove it back. She wanted to laugh hysterically. She wanted to let go and slide to the floor and go to

sleep while someone else came in and cleaned up the mess.

Realizing that she could only hold off the rising hysteria until someone did make a rational move, Barbara reached for and drained the highball on the bar. She augmented this slug with a muscle-sized hooker from the bottle. The liquor burned down and helped to iron out her jittery nerves.

She grabbed the ice-pitcher which was filled now with melted cubes and a slosh of water. Unceremoniously she poured the cold mess over Dusty's white face.

Dusty's eyes fluttered and his voice made spluttering noises. "Wha—?" he fumbled.

"Come off it!" snapped Barbara.

Dusty sat up weakly. He looked around for a moment as if he weren't quite sure of where he was. Then he caught sight of Scyth and it all came back to him. He scrambled to his feet and took the bottle from Barbara's hand. He took a healthy slug himself and then said, "He tried to—tried to—"

Barbara laughed hysterically. Between gales of half-mad laughter, she said, "Tried to beat the fastest man—in The Space Patrol—to the draw!"

Dusty slapped her across the face with the flat of his hand. "Shut up!" he roared. "Shut up and make sense!"

She came out of the hysteria instantly, shrinking back from Dusty with a hand against the growing redness on her face. "Dusty—don't—"

He shook his head hard. "Sorry. You needed it."

"I know. But he—? Look, Dusty, what do we do now?"

Dusty looked down at the bleeding man. "Cops," he said thickly. "I've just shot a—" He could not finish; his face was turning green again.

"Cops nothing," snapped Barbara.

"But shooting—"

"Come off it, Dusty. The cops will only delay and investigate and generally botch things up until it will be two months and a thousand years from here."

"Cops aren't that stupid."

"Cops aren't stupid at all," she

snapped. "They're just smart enough to insist on knowing all the answers. So tell you what. You go to the phone and call Lieutenant Yonkers and explain carefully that you've just shot a Marandian Marauder in my living room. Tell him you've collected one of your Great Galactics, only he's defunct. See how far you'll get!"

Dusty looked at her blankly.

"The first stop will be the bull pen," she went on hotly. "The second stop is the nut-locker. And the third stop is some unknown star a thousand years from now while the F.B.I. try to match the guy's fingerprints. Then you call on me for a witness and that gets us the front page in big black letters saying: 'Former Hero Shoots Rival In Leading Lady's Boudoir!' Start thinking right, Dusty Britton. Or," she added scathingly, "call up one of your writers."

Dusty considered. "I could slope out of here and—"

"Like hell you will!" she screamed. "You're not leaving me here with a body to explain."

"But defending your—"

Barbara's scorn was high. "Look, Dusty, ever since we were sighted offshore in the Buccaneer I haven't had a shred of virtue and everybody knows it."

"Trouble is that we can't even run," grumbled Dusty. "This is your apartment."

Barbara looked down at Scyth. "Damned nuisance," she said.

The damned nuisance groaned. The sound was hollow and weak but it seemed to ring through the room like the cry of a wailing ghost.

Barbara cried: "He's alive—"

"—not dead!" blurted Dusty. "Get water and stuff."

**S**LOWLY they stretched Scyth out on his back, and Barbara went for her first aid kit while Dusty slid off Scyth's jacket and ripped the shirt free. The wound looked frightful, but some sponging with hot water and alcohol reduced the horror to a weeping hole that tried to breathe blood in and out. It was low on

one side, somewhere near the floating ribs on the right.

"Flesh wound?" asked Dusty hopefully.

"I wouldn't know. Maybe." Barbara flipped the pages of a large book from her library, a book that had not been used much. "It says a compress."

Dusty made a pad of bandage and cotton and covered the hole. He taped it down. Scyth groaned again and Barbara cracked open an inhalant vial and put the stuff under Scyth's nose.

"Wh— wha— di' you hi' me wi'?"

Dusty never knew from where he found the moral strength to be hard-boiled. But all of a sudden the feeling that this was one hell of a mess left him; his next feeling was one of confidence and self-justification. "It's called a belly gun," he said. "But you'll be all right in a couple of months. Maybe three."

Scyth tried to struggle up but failed. He fell back and lay there glaring at them. He gasped, "Cou'le munce?"

"Sure. Stop crying. It's just a flesh wound."

"Bu' in cou'le munce—'ll be—bar'rine fiel'—gone—"

"Take it, Scyth. Sure. It's tough," said Dusty in a cold, matter-of-fact voice. "You've played and lost, but that's all right. Be a good loser. You've got a lot of company."

"Com'any?"

"Sure. There's millions of guys who've lost their future and their birthright over the flick of a hemline. We're a primitive sort of race, old man, but you'll find us both healthy and lusty. Forget Marandis and your ding-busted beacons. Maybe you can help us build a spacecraft—after we get through this barytrine business your friends cooked up for us."

"Bu' can—mus' not—Chat an' Bren—die—"

"Nonsense."

Barbara plucked at Dusty's sleeve. "He's talking about his friends. Chat and Bren. On Mercury, remember?"

"Oh, don't worry about them."

"But don't you see, Dusty? If we go into the barytrine field, and trap Scyth

and his spacecraft with us, his friends will be marooned on Mercury."

Dusty nodded quickly. "Sure and that's what I'm counting on. They'll not start Sol into a variable until Scyth gets back. So—"

"Don't be blind. They won't start the variable star, but no one can stop the barytrine field. They'll still be marooned."

Dusty grinned. "You don't think a gang this advanced would be so dumb as to leave a couple of their kind marooned on a place like Mercury, do you? Well, I'll tell you how I've got it figured, Barb. Exactly eight seconds after Scyth does not land as per schedule, Chat and Bren will be calling for help on these phanoband things. That'll take care of them. But as for this guy, let's cheer up. We've got a sort of hostage. Scyth will be most happy to make a spacecraft for us as soon as he gets back on his feet. Chat and Bren will, of course, be taken care of some thousand years before we—"

Scyth groaned loudly.

"Huh?" demanded Dusty.

"S'no-so. Bren an' Chat—alone. No—no—famban—phan'ban'—phanoban' on Mer'cry. Die—"

Barbara started to say, "But your company—" but Dusty turned quickly and slapped a broad hand over her mouth.

"Shut up," he whispered in her ear swiftly. "He's got to think there is no help. He's forgotten that someone knows they're here. Play it by ear and follow my lead."

"What can you hope to do?"

"I don't know," said Dusty. "But I'm hoping that I find out." Loud enough for Scyth to hear, Dusty asked, helplessly, "But what can we do?"

"Car— ou'side. Spacer. Pocket—map."

DUSTY made a dive for Scyth's jacket and found a folded road map in one of the pockets. Like any stranger in a strange land, Scyth had outlined the route in a heavy blue pencil. His travel was detailed, it took Dusty no more than a glance to place the location of Scyth's big spacecraft.

Scyth rested a moment and then went on: "Hurt—can be doc'or on Maran'is. Hurry—"

Dusty grunted. "And who's going to run this spacecraft of yours?"

"You—easy—"

Barbara looked at Dusty cynically. "It's your show, Spaceman Officer." She laughed hysterically again. "Dusty Britton Rides Again!"

Dusty slapped her across the face to shock her out of it. Then he bent down to look at Scyth. The compress was soaked with red blood, but it was not overflowing. Dusty touched it gently and looked up at Scyth's face. "Hurt?" he asked.

"Can' tell. Hur' all over."

"Gonna hurt more, Scyth. C'mon. make a break."

Dusty put his arm under the Marandian's shoulder and slowly lifted him to a sitting position. The man groaned and the compress broke out in a new flood that ran wet for a moment and then subsided in the stickiness of clot.

Dusty lifted Scyth as gently as he could, and with Barbara opening doors, he carried Scyth to his big car.

"Why not take his?" she asked.

"Like mine better," he said with a shake of his head at the rental-agency model Scyth had come in.

Barbara found blankets from the trunk and made a soft cushion for Scyth.

"You take care of him and I'll drive," said Dusty.

Barbara shook her head. "I—you take care of him and I'll drive."

"But I know the route."

"I can read a map as well as you can."

Scyth opened his eyes wearily, but with a trace of bitter humor he managed to say, "You take care—of one another— and I'll drive!"

Then Scyth passed out cold.

have found it.

On the way Scyth babbled about the drive and how to run the big ship. Happily, Scyth's periods of delirium were easy to separate from his periods of lucidity, for when Scyth began to babble he talked cynically about the stupidity of taking four hours to travel less than a couple of hundred miles when they could cover light years in the matter of minutes. Then he would become quite rational and tell Dusty how to recognize the beacons as they came into sight, and where the charts were. He had to get back to Marandis, and he told Dusty the way.

Then his mind would wander a bit and Scyth would chuckle quietly over something entirely removed from spaceman-ship. Then would come a discussion of the levers that must be turned and the meters that must be watched; how to turn the correct knob or to push the proper pedal. He spoke of cautions, too. They must not turn on the space drive until the ship had warmed for a certain length of time (which the menslator interpreted to Dusty as a vague quantity of minutes. To be safe, Dusty would wait twice that long) and then Scyth would lapse again.

But as the drive went on, Scyth's periods of lucidity waned. His moments of babbling dropped too; and between them both came longer and longer periods of dead silence and heavy breathing.

Yet by the time Dusty drove his car underneath one tailfin, he had a fair idea of how to run the spacecraft.

## VIII

**D**USTY carried Scyth to the salon and dropped him on a divan. He left Barbara to take care of the Marandian while he went aloft into the control room to take over.

Once inside the room Dusty stopped short.

He was a Hottentot in a powerhouse, a savage in a Plutonium refining plant, a tone-deaf idiot standing before a four-console organ. There were meters and

**F**OUR hours drive into the foothills, far from the lights of civilization, Dusty found the big spacecraft. It was parked in a small valley and it was colored so that only a man who knew what he was seeking and where it was would

switches and levers and toggles, neatly mounted on gleaming black panels and clearly lettered in shining white. He stared at a pilot lamp labeled æ: \*œæ; œ\*œ and wondered foolishly whether the gleam of red meant that the spaceport was still open or whether it signaled that smoking was forbidden for the time being.

And Dusty was supposed to drive this.

Stunned, Dusty dropped into the pilot's chair and looked around him in a completely dazed manner. Below his feet were pedals and just below the surface of the slanting panel were a pair of knee-flappers that could be pressed without losing the thrust on a foot pedal. The desk-thing was studded with large levers mounted in curve-segments all carefully marked in the calibrations of the Marandanian language. To his left was a panel filled with push-buttons from the floor to the level above his head where his long arm could reach without standing up. To his right was a similar panel. Dead ahead was a flat plate that looked like frosted glass and seemed to Dusty about as useful. It neither glowed, nor showed a spot of color other than the very logical reticule-lines which were to be used for aiming the ship. Above the plate of glass was a line of meters and another line of them below.

Dusty shivered. No matter in which way he reached he could touch buttons, or thumb levers or turn dials.

Doubtless the competent Marandanian pilot played this console like a pianist—strictly from practise. A mere matter of training; when the concert master calls for 'A' the musician automatically reaches for the right position and drops his fore-finger.

This was no instrument to play by-ear.

Or—was it?

"Barb!"

"Yes, Dusty?"

"Barb, find that damned menslator and bring it up here. It might—"

A moment later she came up the stairs with the small instrument in her hands. She gasped as she saw the array of controls and asked, "I thought he said it was easy?"

"To him," growled Dusty. He fitted the menslator on his shoulder by its strap and fiddled with the controls. He hit one setting that made Barbara cry out inexplicably (which irritated him) and then he found another setting that made him feel like a hundred and seventy pounds of toothache (then he forgave Barbara) and after some more fiddling with the tuning and the gain Dusty hit the right setting.

Everything became clear to him.

Directly in front of him was a meter that read "Rhenic Doubler Current" and to one side was a lever labelled "Phano-band Isolator" and some pushbuttons marked "Polylateral Overload Reset" and "Primary Exchange Test." The rest, too, were very logical but equally meaningless. "Drive Pulse Synchronizer" must have some definite function because it was a large lever almost in the middle of the desk-panel and what one did with it was undoubtedly taught in the first grade of spaceman's school.

There was a large and interesting handwheel labelled "Drive Angle Trim" which Dusty gathered to be the gizmo used to equalize the drivers so the ship wouldn't yawn in flight, but he was not quite sure. There was another called the "Preflight Check Sequence" which probably checked the multitudinous functions of the instruments as it was turned from position to position, but what it did or what it told the pilot made no nevermind to Dusty Britton of The Space Patrol.

THERE was one that he recognized instantly. It said, reading from left to right "Off, Warm-up, Stand-by, Operate." It was a big four-position hand-lever and it was a good idea, excepting what did Dusty do next?

"Can Scyth help?" pleaded Dusty.

"He's out cold like a Northern Light. Lost blood and—"

"But how'm I to run this godawful thing?"

"I don't know," said Barbara doubtfully. "Try something."

"What?" he asked.

She pointed to a small button high on the front panel beside the glazed plate. It said, "SC/WBN-3 Phanoband 22".

Dusty looked at the nameplate and the menslator helped him translate the nameplate into "Space, Commercial/Non-adjustable, High-power, Emergency—Model Three. Phanoband Twenty-Two."

Dusty looked at Barbara and shrugged. This was an emergency, so Dusty put out a forefinger and pressed the button.

A pilot lamp winked from blue to red and a meter on the forepanel rose. There was a momentary whirring from far below in the big star ship and then along the bottom of the ground-glass looking window in front of him, a small circle began to grow luminous. A man's face appeared.

He was obviously in some sort of uniform; it had that air. The collar was high and the effect was uncomfortable. A pair of gold diagrams glistened on one shoulder. The man looked human enough to be the local desk-sergeant in costume dress. As soon as the little circle was completely clear he said tersely:

"Distress Call received. Identify yourself, state your position, define your danger, and estimate the time remaining in which you have a factor of safety."

Dusty blinked and then looked at Barbara. She shrugged. Dusty shrugged back and said, "Are you Marandis?"

"This is Marandis Emergency. Identify yourself, state your pos—"

"Stop talking like a robot—or are you a robot?"

"I am not! What is the meaning of this? Using a distress-call band for—"

"This is a distress call," snapped Dusty. "And part of the distress is that I can't identify myself because I don't know the language."

"You'll have—"

"The other part of the distress is that the man who knows all about this is likely to die of a bad accident if he is not given medical attention. So now you know, tell me what to do next."

"Who are you?"

"I am Dusty Britton, if that means anything."

"I don't know you."

"Of course not. I've never been to Marandis. I'm not a Marandian, just a character of the race your playmates term 'Backward,' and/or 'Primitive.' But you better do something fast."

"What is the name of the injured party?"

"Scyth Radnor."

"Then your identity is Exploration License K-221-Y. I know Radnor. I must get you off the distress band. Please switch to Space Communications, Band Forty-Five. I—"

"Wait," said Dusty quickly. "As a member of another solar culture you must be aware of the fact that I am not familiar with your equipment. Which knob do I twist and how far?"

The Marandian gave Dusty instructions and waited for a second small circle to appear beside the first, with a different face in it. This face was older and not in uniform. The man said, "Please explain the nature of your difficulty. I am Gant Nerley."

As well as he could, under the circumstances, Dusty explained his predicament.

"I see," said Gant Nerley thoughtfully. "This is a rather complex problem to solve. Can you state your location?"

"Hardly."

"I suppose not. If we don't know where you are from here, the chance that a non-galactic culture would know where we are from there is indeed remote."

"Haven't you a filed plan of operations?" demanded Dusty, using a tone of voice that indicated that he thought that any culture above the level of the ape wouldn't let people go galloping all over the galaxy, tearing up stars and ruining scenery without first having filed a program and had such program approved by twenty-seven signatures.

"There is a filed plan," said Nerley defensively. "But naturally it is sealed as a matter of protection for the company."

"And no provision for emergency?"

"Only by the consent of the licensed company."



"Then you'd better call a conference at once. Scyth isn't going to last long enough for you to comb the galaxy for us."

"That's why it might be better to let the barytrine field run to completion."

DUSTY'S voice grew hard. "I wish you birds would stop tossing off a thousand years of our life with the flick of a finger," he said.

"What difference does it make? You'd not notice it, and—"

"Who says so?" snapped Dusty, his irritation mounting.

"Time is of importance only when its passage can be measured in reference to outside events. You have no contact with outside events. Therefore it makes no difference whether you come in contact with us now or a thousand years from now, so long as the same people of your culture are involved."

"Now see here—"

"Permit me to present an example. If the barytrine field went on at this instant, one thousand years from now my successor would pick up the thread of the conversation from the recording we are making, and take on from here. As far as you are concerned the only difference would be a sudden flick of the view-screen and a rather abrupt change in the facial characteristics of your conferee." Gant Nerley waited a moment to let the point sink in. "Now, since you and I have very little in common, it should make little difference to you whether you spoke to me or to someone else. And as far as I am concerned, I feel the same. I have long since ceased feeling regretful that I cannot retain friendship with the hundreds of thousands of people with whom I must converse. I have almost stopped being regretful of the fact that there are so many worlds that no single lifetime would permit a visit to more than a fraction. I suggest that you try to take a more lasting attitude. You sound as though the troubles of a world you never saw were of prime importance to you."

"Look," said Dusty testily, "A lot of

what you claim may be true. But we have a couple of thousand years of observational data on the planets and the nearby stars. You may take a thousand years out of our lives in the twinkle of a second, but then we spend another five hundred on top of that finding out where we are."

"You have time."

"We have not!" roared Dusty. "Move us to a new system and I'll tell you what'll happen. Before we can make a move into space we have to chart the new system completely, because we admit that our reaction motors are not efficient enough to take off without a well pre-charted course. We must know the orbits of the planets to a fine degree before we dare. Then, before we can make a try for the stars, we've got to spend years and years in observation before we can chart the nearest stars and observe whether or not they might have planets, our astronomy will be put back. Now—"

"Pardon me, but the information I have regarding your system is before me. Your space travel is primitive and any form of real commerce is as yet impossible. This I get from the license application for barytrine operations. Now, how can you justify your statements about interstellar travel?"

Dusty Britton, no matter what else, was a good actor any time he could sit in with a large Virginia Ham to carve. Dusty would never play Hamlet or Julius Caesar; a custard pie in the face was closer to Dusty's art than John Barrymore. This fact provided for Dusty a rather interesting background for the present argument. A student of science could not have faced Gant Nerley without paying deference to the Marandanian's obviously superior knowledge, position and experience. The learned man makes no flat-footed statements; this leads to the odd belief that most learned men are not entirely sure of themselves. It is the bird who is ignorant of all the myriad things that he does not know that can afford to stand up on his hind feet and reel off chapter and verse as though there could be no rebuttal.

**SO DUSTY BRITTON**, who could portray a reasonably convincing role of a wounded hero while mentally contemplating how long it would be before the first preprandial martini, plus being the flamboyant type who never lets a few facts stop his flow of words, was not abashed to let on that he knew a lot more than the Marandanian suspected. Furthermore, Dusty felt that he had Gant Nerley on the defensive, and if he could put the Marandanian off balance long enough to accomplish something, Dusty did not care if Nerley accused him of being a four-flusher at some later date.

Keeping this in mind, Dusty braced himself with little effort and tried to reduce to bafflebag what he recalled of Scyth Radnor's previous statements.

"Interstellar travel is, of course, based upon obvious errors in the theoretical mathematics of general relativity," said Dusty, as though he were reciting some of the science-double-talk usually included in Dusty Britton And The Space Patrol. "Of the many schools of thought which have their own theories on how to explain these obvious errors, the group-velocity field seems to be the most successful. But all of them are seeking some evidence to support their theories, and a couple of them, namely the gravitic and the magnetic-field proponents claim that such evidence has already supported their claim. Now, if such is the case, you know it will not be long before some practical experiment will disprove the illogic of providing a finite limit to an infinite system. Once this has been established it seems obvious that star-travel is the next step."

"Hmmm—I see. This is a situation that must be considered more carefully. May I ask, Dusty Britton, what is your position in your society?"

"I am Dusty Britton of The Space Patrol," said Dusty with the proper tone of respect. "Commander in Chief of the Junior Division."

"Indeed! A real Space Patrol!"

Dusty nodded at the viewscreen. "It may be a bit ambitious," he remarked with even more deference, carefully

studied. "But we feel that there is small point in using a conservative name and then having to change it every couple of years."

"Quite a sensible attitude."

Dusty nodded again. "Fact is," he said deprecatingly, "we would probably be quite a bit more advanced in our space operations if our sister planets were not so inimical to human life. As it is, our extra-planetary operations are limited and will be limited until we can provide the necessary conversions to terrestrial conditions."

Gant Nerley nodded back. "Man is not an adaptable animal," he observed. "He does not change himself to suit his environment; he changes his environment to suit himself."

"That's what I mean."

"Then why do you object so much to this barytrine field?" asked Gant Nerley. "We can always pick you a stellar group less inimical to human life and thus advance you faster."

Dusty grunted under his breath. He had talked too much. "Buster," he said angrily, "logic like that will only get you a fat lip."

Gant Nerley blinked. "Tell me, Dusty, was Scyth Radnor hurt in some altercation over this beacon?"

**BY THIS** time Dusty figured that he might as well let Gant Nerley have it cold and hard. It would show Gant that the mighty Marandanian was no more distant from the lusty chimpanzee than the terrestrial.

"No," he said flatly, "Scyth was plugged for monkeying around another man's woman."

Gant said, "Deplorable," in a tone of voice that indicated an amused disgust, but not easily identified as to whether over the act itself or the business of being caught at it. "What happened?"

"The other guy shot first," said Dusty, feeling that this was no time to point out that it was he that pulled the trigger.

"I'm not surprised. Most primitives are inclined to be both hot-headed and impulsive."

"Tell me," asked Dusty in a cooing voice, "did Scyth confine his amours to primitives, or is it the custom among Marandanians to consider your mate unattractive unless she can prove it by bedding down with an impressive list of lovers?"

"I don't understand," replied Gant Nerley stiffly.

"Against primitives I can understand Scyth carrying a weapon to his assignation, for protection against the irate cuckold. Tell me, Gant Nerley, has your emotional balance become so stable that you can take a more scholarly view of promiscuity? Or," added Dusty sharply, "do you have big black headlines about triangle slayings and love-nest scandals just like the rest of humanity?"

"Well, now, we—"

"Then don't blame us primitive souls for slugging a guy that's caught off base!" snapped Dusty. "Now, what are we going to do about Scyth?"

"Regardless of his depredations against propriety, he must be given medical attention."

"This I will go along with. How shall we start? I can always take him to one of our hospitals."

"No. No! You must not."

"Why not? We're quite-competent on gunshot wounds. We're probably more used to them than you are, as primitives with impulse and hot blood."

"Please. Let's not be facetious over any man's misfortune."

"In blunt words, the life of a character caught in an awkward situation is more important than someone else losing their familiar stellar scenery and a couple of thousand years of climb up from the swamp of ignorance?"

"That is another question which I'm sure we can solve. Now—"

"Look," said Dusty firmly, "you agree to take measures for our safety and we'll agree to take measures for Scyth's. Do you understand exactly what I mean or shall I explain in very blunt words?"

"That is blackmail."

"It's worse than that. But we're primitive, and therefore lacking in refinement.

As far as I am concerned, Transgalactic can keep their secret of our position locked in their sealed file. Scyth can die, and Bren and Chat can spend the rest of their lives marooned on Mercury."

"No. That wouldn't be right. You must bring Scyth back home."

"That's a fine idea! May I suggest that your ship is not as familiar as mine?" Dusty did not mention that the only control room he was familiar with was the one on the Gramer Production Lot, which was an aggregation of fantastic levers and flashing lights and futuristic three-phase busbars which had a most profound effect upon the imagination of the youth of the land but no effect upon space whatsoever.

"This can be taken care of. As a spaceman, you can understand the principles. They are simple. You can follow directions for flight."

"Yes? And which way do I go from here?"

"Not so fast. First, Dusty Britton, tell me the present condition of Scyth Radnor."

"Wait."

DUSTY went below. Scyth was in a state of shock. His temperature "taken with the flat of Dusty's hand" was chill—and there was a film of perspiration wetting Scyth's body. The breathing was shallow and the face was pale. Scyth's pulse was weak and the heartbeat thin.

Dusty turned a light blanket over the Marandanian and then went back to report.

Gant Nerley said, "In the salon you will find a medicine cabinet. The instructions are simple, any intelligent being with a menslator should be able to follow them concisely. How is the bleeding?"

"Stopped. Clotted by now."

"Take care of Scyth, Dusty Britton. We'll figure out something for you."

"How about this barytrine field that's running away with itself?"

"We'll stop it. Behind you on the auxiliary panel you will see a knob and

a pilot lamp, probably orange colored. Turn the knob to the left."

Dusty did, and the lamp went out.

"That's it. I see that Scyth has the usual sloppy habits of his kind. No label. According to space regulations the operator is supposed to slip a label into the frame above the auxiliary control whenever he has anything extra set up. I'll mark that oversight down on Scyth Radnor's record. Now—"

"What about Chat and Bren and that variable-star maker?"

Gant Nerley grunted. "If they're not keeping a close eye on the barytrine field detector, so they can shut off their own equipment when it fails, I'll revoke their licenses! They must be looking at the temporal field, or at least keeping watch."

"We hope."

Gant nodded thoughtfully. "Now," he said, "this being an emergency, I'll open their course-plan so that I can direct you through space. Don't turn off the viewpanel, Dusty. I'll be back in a few minutes."

## IX

AS SOON as Gant Nerley's face disappeared from the viewpanel, Dusty turned to face Barbara. She was standing far to one side, out of range of the viewpanel, and stifling a giggle. She let it bubble through her fingers as soon as Dusty caught her eye.

"Funny as hell," he said. "Me—I'm hysterical."

Barbara sobered immediately. "Hondest, Dusty. I wasn't laughing at you. I was laughing with you."

"Why?" he demanded sharply.

"Because you really fooled that bird. Dusty Britton of The Space Patrol. Yes, I can navigate a ship."

"I'm going to. Want out?"

"I wouldn't miss this for the world. Glad we've got the whole galaxy for you to make mistakes in."

"Stop making fun," he snapped.

"Let's try and think of something sensible, Barb."

"Too bad we haven't time to take a run back to the city."

"What good would that do?"

"Well, you could show 'em that bawble you're wearing and I could try the menslator out on 'em, and maybe between us we could convince 'em that there's something more in this tale of mine than wind."

"That's an idea, but it's out."

"I know. But—"

"Dusty, you'll have to carry it to Gant Nerley yourself."

"Carry what?"

Barbara shook her head impatiently. "Think!" she cried. "Dusty, this license might be rescinded if we can show that Sol has evolved above the minimum level of acceptability."

"Yes?"

"Then go in there with your head up and let 'em know how we're built."

Dusty waved at the field of instruments on the control position. "Open my yap and let 'em know how ignorant we are? We should have a couple of scientists along."

Barbara shook her head. "No," she said slowly. "One of the marks of a real scientist is that he usually considers that he knows a lot less than he does. You're better off. You don't know enough to confuse yourself. Besides, Dusty, you're an actor."

"Um—er—Jeeks! Hang on a mo' will you? I've an idea."

Dusty loped down the stairs to his car and opened the compartment behind the front seat. It was his emergency kit; it held his Dusty Britton uniform, the complete regalia of The Space Patrol complete with Dusty Britton 'Blaster' concealed against the days when Dusty found himself trapped in public and could not appear out of character.

He changed in the car and went back to the control room.

Barbara took one look at him and nodded slowly. "You're a gaudy sight," she said. "But maybe that's what it takes."

Dusty slapped the 'Blaster' at his hip. "I look authentic enough except for this

hunk of hardware," he said. "Hell, it isn't even as useful as a dress sword."

"Your revolver? Oh—still on my living room floor."

Dusty unbelted the holster. "I shouldn't have to go armed everywhere, should I?"

"I suppose not."

"All right, then. How do I look?"

BARBARA smiled thinly, "Dusty, no one on earth would ever accuse you of being anything but a Hollywood actor in that get-up. But a man from halfway across the Galaxy itself might not know about these things. You might be an Admiral of the Swiss Navy. You're impressive-looking. Just don't get pompous."

"Just you remember that I'm Dusty Britton of The Space Patrol and don't giggle when I start dishing it out."

"I won't. After all, I call myself an actress, you know." She looked nervously at the viewpanel.

"Are you all right?" he demanded.

"Yes. I'm nervous but I'll be all right."

Dusty went over to her and put his hands on her shoulders. "Take a deep breath," he commanded. She did. "Now let it out slowly." She did that, too. "Now," he said softly, slipping an arm around her and leading her to the stairway, "You come down below and relax. Pull yourself together, Barb. We'll make it—somehow."

"Got any ideas?"

"Not yet. But—"

Above, the voice of Gant Nerley came back. Dusty raced aloft and apologized for having been absent. Gant was nodding with admiration at something below the level of the view panel, probably something on the desk.

Gant looked up after a moment and said, "Dusty Britton, this is really a remarkable route. Truly fantastic. So well hidden, and yet right within our grasp all of these centuries! Well, you shall see, Dusty. And doubtless you will agree."

"Okay," said Dusty, "let's get going."

"Not so fast, young man. I'm waiting for the direction-finding stations to report so that I can determine where along this prospected route you lie."

"We're about two-thirds of the way out from the center, I believe," offered Dusty.

"That's a rather inaccurate generality. You know where you are and we know where we are, but we must know where we are with respect to one another before we can make contact. Now—" Gant's voice stopped suddenly as something caught his eye above the lens of the viewpanel, and he looked over Dusty's head, apparently, so intently that Dusty himself turned to see what Gant was staring at. He saw only instruments, and realized that Gant was looking at another panel-section above the one that communicated with Dusty's panel.

"Um," said Gant. "You would appear to lie in what we call 'Sector G-18, Co-ordinate 307, Galactic Angle 215.86-plus degrees, South altitude-angle 1.017-minus degrees, Co-frame 9654.' Now, Dusty, in your terms, where lies the Galactic Center?"

Dusty laughed. The tone of his laugh was half bitter and half a note of self-disparagement. "Sorry, Gant. We frame our reference from Terra, naturally."

Dusty breathed a sigh of relief at having boned up on enough science to play his part convincingly.

"I do not quite understand what you mean," returned Gant.

"We compute stellar positions in latitude from the angle above or below the equator of Terra, which we call 'Declination' and in longitude by their rise as the planet rotates, which we call 'Right Ascension'. Therefore the so-called 'Celestial equator' is a projection of the Earth's equator upon the sky, and the colures pass from celestial pole to celestial pole, which are projections of Terra's axis. Now, since the Earth's equator is tilted with respect to the Earth's orbit, and the Earth's orbit is tilted with respect to the Galactic Equator, I'll be darned if I know how to explain in mutual terms. Oh, we assume

that the galactic center is in a region of the sky we call 'Saggitarius' but that is meaningless."

"I agree. Wait a moment."

GANT turned from the window in Dusty's viewpanel and walked away from it by several yards. He worked over a complicated keyboard for some minutes and then returned.

"Dusty," he said, "I think we can handle this as follows. To your left hand near the top of the control board you will find a key-lever marked Phano-beacon. Pull it towards you."

Dusty looked, found the key, and pulled. A bright spot of light appeared on the view panel, high in the left hand corner. "That is the true position of Marandis," said Gant Nerley. "If you tried to make it at transgalactic speeds you'd plough into about forty stars and hit about nineteen gas-clouds. You'd either blow up, or spend the rest of your life running at safe velocities. However, if you take off and steer your spacecraft so as to put that beacon spot on the calibration lines G-705, F-318, you should find the next rift-beacon somewhere near to the cross-hairs of the viewpanel. Got it?"

"I think so."

"Good. Now, for take-off instructions. Ready?"

"Ready."

Gant Nerley began a running patter of instructions. Those favored few who have ever seen the control room of a spacecraft can possibly grasp the implications of the problem. One does not step into the pilot's chair of a complex device such as a galactic cruiser, push a pedal and then steer any more than a Wall Street Accountant could step into the cockpit of a six-engine airliner and take off, just like that. There was the pre-flight checkoff, probably performed by the competent Marandian Pilot in a matter of minutes, and quite possibly done with an automatic reflex action which would permit the accomplished pilot to daydream about the girl on the next planet meanwhile; only the appear-

ance of the wrong pilot-lamp response would bring him out of his automatic response with an abrupt recognition of something awry.

BUT Dusty was not a pilot, and certainly not a pilot of a Marandian Spacecraft. So the pre-flight checkoff took almost an hour. Nearly ninety-nine percent of the time Dusty was following Gant Nerley's instructions blindly: Is the pilot lamp registering power source showing red or green? Is the spacelock indicator showing closed? Turn the atmosphere control to Internal. Set the autogravity corrector to Controlled. Co-stator circuits to Regulated; antimagnetic response dial to zero; space-coordinate servo control to Stellar Display. Planetary Drive to Automatic Threshold; match the Gravitic Constant to the Power Delivery. Set the Master Control to Preflight Warmup.

"Now," said Gant Nerley, "take it slow and easy. Take the 'Tee' bar gently. Find the thumb-buttons and press them both evenly; spread your knees against the paddles under the control panel slowly and press the Force pedal with your right foot. Tell me, what is your trans-atmospheric velocity?"

"It says 416."

"Too high. Press the Compensator pedal with your left foot until the TAV meter reads 312."

"Now."

"Hold it that way until the Matter Per Cubic Meter indicator drops below the red line."

"The TAV meter is dropping below 312."

"Good. Let up on the Compensator pedal and depress the Force pedal more. Keep the TAV meter at 312."

"The Matter Per Cubic Meter indicator is below the red line, Gant."

"Free the Compensator pedal. Push the Force pedal all the way home and kick it to the right. Now read the Trans-atmospheric velocity meter."

"Dropping rapidly."

"Good. And the MCPM?"

"Dropping rapidly."



"Excellent. Spread the knee-paddles wide and lock them. Have you a reading yet on the Space Velocity Meter?"

"Just getting off the peg."

"Um—it is a little early. But that's all right. It will arrive in due time. Keep an eye on the Foreign Body Indicator, Dusty. Any reading?"

"No."

"Good. Don't touch the 'Tee' bar, Dusty. That's the steering mechanism and it is in neutral. Is there any indication on the viewpanel yet?"

"Not yet."

"Haven't enough velocity yet," said Gant. "But when it appears, it will look like a star map. Now, the central cross-hair is the point of aim of your spacecraft. If the star you want lies, say, to the upper left, move the 'Tee' bar forward and to your left. That will swing the ship in that direction and you can line up the drive with the target. Also, since angular position is important when moving in three free dimensions, twisting the crossbar of the 'Tee' will cause the ship to rotate on its axis. The map will turn in the direction, apparently, but it is really the ship turning. That is—"

"I'm beginning to get a presentation now," said Dusty.

"Good. Dim and reddish, isn't it?"

"Yes."

"Fine. Now get this straight and clear: The phanobeacon is the control beacon for direction of angular curve. In other words, it takes three points to define the orientation of a plane in space. These three points are you, the star-beacon or course-marker which you will find directly, and the main terminal-beacon which is the phanobeacon. You must drive your ship in the proper plane when making a curve or making any turn. Follow?"

"Yes," replied Dusty, trying to think it out. He was far from certain about all this, wondering why it was all necessary. He went over the instructions in his mind, made no more sense out of it than the first time, and then decided to accept it without trying to figure out

the reasons. After all, Gant Nerley and his folks ought to know what they were doing.

"Now," said Gant, after a moment, "In order to orient yourself, you must line up the Phanobeacon on the point of aim. Take the 'Tee' bar firmly, one hand on either side of the axle. Find the thumb-buttons on the handle. Press them all the way in and lock them home with a slight sidewise pressure towards the center. Got that? Now, lift the 'Tee' bar straight up until it is high enough to manipulate with ease. Be careful, don't move it sidewise!"

THE last admonition was wasted. Dusty lifted the 'Tee' bar gingerly and not too evenly. The stars on the viewpanel danced dizzily, swiveled, and flowed across the plate. The bright phanobeacon spot moved from the plate along the bottom, danced back in view on a brief curve, and left again along a flat slant. The 'Tee' bar clicked into place and the stars stopped dancing with a snap. Dusty moved the 'Tee' bar gently and the stars flowed upward until the phanobeacon re-appeared.

"Got it," he said shakily. He moved the 'Tee' bar very gently until the phanobeacon was centered on the screen. Or, rather, almost centered. It moved in jerky little circles like the sights of a rifle in the hands of a tyro.

"Fine. You're doing well with strange equipment. Now, on the panel you will find a switch marked 'Co-ordinates.' It will be set on 'Rectangular' and you must flip it to 'Polar'."

The switch changed the cross-hair pattern of the viewpanel from the horizontal and vertical calibrations to a circular pattern with only the main center hairlines remaining. Angle-lines radiated out from the center, crossing the circles.

"Now, Dusty, inspect the radius-line marked G-705. All the way around. Do you see a winking star?"

"No."

"Um. I was hoping we could do it the easy way. The sealed course-plan is not too clear, for which I don't blame

Transgalactic. All right. We'll have to do it the hard way. Move the phanobeacon down until it is almost on the lower edge of the viewpanel. Now flip the 'Co-ordinates' switch to the left, leaving it in the bottom position marked 'Polar.' You'll find that the toggle has an 'H' type pattern of motion, laid flatwise."

The polar co-ordinates disappeared completely from the center of the viewpanel and centered around the phanobeacon spot. They made larger and larger arcs as the circles approached the top of the panel.

"Now this is going to be tricky. You must twist the 'Tee' bar slowly and let the ship rotate, but you must also move it so that the phanobeacon stays near its present off-center position. But before you do this, let me explain what you are actually doing in space. Picture a needle-shaped spacecraft with a line along the axis running out before the ship, marking the line of drive, or direction. At some distance from the line lies a spot which denotes the phanobeacon. Somewhere out beyond, there is another spot that must be sighted within the confines of an angle not greater than the angle made between the point of aim, or line of drive, and the imaginary line running from the nose of the ship to the phanobeacon. So you must cause the ship to rotate on a false axis, making the line of flight describe a cone of revolution with the phanobeacon on the axis of the cone. Now, go ahead and try."

"Okay." Dusty moved the 'Tee' bar and the stars moved in jaggedly little scallops along a greater arc. The center of the beacon held the polar lines, but they moved with the stars and with the beacon. It made Dusty dizzy and his eyes began to ache. "What am I looking for?" he asked plaintively.

"Look along the outer circles for a winking star—"

"Got it!"

"Good. Turn the 'Tee' bar to neutral," said Gant. "Return the 'Coordinate' switch back to the center of the 'H' pattern. Center the stellar course beacon

on the point of aim."

The winking star flashed at Dusty like a flag. It danced crazily as he manipulated the 'Tee' bar with all of the thumb-handedness of the rookie pilot on his first attempt at the controls. There was so much to do, so many things to handle, so many motions to make. Dusty gripped the 'Tee' bar tightly, too tightly. When he let go with one hand to flip a switch or to make an adjustment, the grip of his other hand moved the bar. It became sweaty and sticky, then it became slippery and he gripped it even tighter, which made it worse because his fine control left him as he strove to hold the handles tighter and tighter.

In a jagged line like the trail of a rising smoke, the winking star proceeded to the center of the viewpanel. There it hung, wobbling around in tiny circles and occasionally making a brief jerky dart to one side or the other. Dusty mopped his face and the beacon star jumped; he grabbed the handle again and the star leaped across the center and wobbled on the other side of zero-zero.

"Got it," he said in a quavering voice.

"Now rotate the ship until the phanobeacon is on the vertical hairline. Then flip the switch to 'Rectangular' again."

The stars scalloped around in the viewpanel until the phanobeacon was on the vertical line. The field leaped a bit as Dusty found the 'Co-ordinates' switch and returned the calibration-presentation to the horizontal and vertical hairlines.

"Now?" he asked.

"You have a bit of time. Be certain that the star-marker lies firm and true. Be careful!"

Dusty gripped the handles and tried to steady his shaking hands. Then, because he had no more complexity of motions to make, he relaxed a bit. The dancing star-field slowed its mad vibration, which calmed Dusty's jumping nerves still more.

He leaned back in the pilot's chair slowly, his grip on the 'Tee' bar lightening and becoming more true. He looked at the beacon star and knew what Chat,

Bren, and Scyth were working toward.

IT LAY there on the center of his panel like a winking flashlight. Lost in the star field, which showed a myriad of points, some dim cloudy stuff, and a band of milky white, the beacon would have been nothing without that steady wink . . . wink . . . wink. He, himself, was lost. He had not the foggiest notion of where he was, excepting that Mother Terra must be far behind. Sol, a smallish yellowish, completely average dwarf would show nothing to call attention to itself from the distance of a few light years. Yes, somewhere back behind him lay Sol and his planets. But the winking beacon on Dusty's viewpanel was like a banner waved from a distant shore.

No man is alone so long as a light-house flashes its message of safety, or warns against danger.

Dusty took a deep breath. "Barb!" he called.

She came up the ladder. "Call me?" "How's Scyth?" he asked.

"He's doing all right. How're you doing?"

Dusty nodded boyishly. "Look, Maw I'm flyin'," he told her with a chuckle. "Martin Gramer should see me now. This is simple like a duck's ear, and I—"

Barbara screamed and Dusty whipped his head back to look along the direction of her horrified eyes. To the viewpanel.

One of the stars, lost in the glitter of the distant background had detached itself from the immobile sky. It was moving, forward, and its glow was brightening. It came hurtling towards them like a white hot cannonball. One second it was no more than any other star, distant, aloof, and cold. Then it had exploded into a disc that expanded like a released puff of gas. It came toward them like a ball of fire hurled into their faces.

Dusty yelped and twisted on the 'Tee' bar and the stars rolled dizzily across the plate—but not until the white hot monster had flipped past in a quick wave of heat and a final flare of light which

made a small section in the back of Dusty's mind recall the effect of having a foil-filled flashbulb fired during a still photography session.

Shaking, Dusty's grip on the 'Tee' bar tightened and he moved the lever in tight little jerks until the stars returned to the proper positions and the Phanobeacon was properly centered.

Gant's face showed concern. "What happened, Dusty?"

Dusty told the Marandanian, and Gant smiled knowingly. "Don't worry about it. It will happen again and again, and maybe worse. But so long as you keep the course beacon centered properly, you will pass by—and not through—those interfering stars. Now, as soon as your beacon star shows a disc, steer up to keep the beacon centered on Line H-001. Once you pass the beacon, look for another beacon on Line F-312 and bring the point of drive to center on the new one. Follow?"

Dusty nodded at Gant's image on the screen along the bottom of the viewpanel. Another star detached itself from the backdrop of stars and hurled itself into Dusty's teeth. The actor flinched but held his drive. The star passed in a bright flash and a quick wave of heat and was gone. Dusty licked dry lips and forced the grip of his hands to relax. Far to one side another star passed in a majestic sweep, too distant to bring them either heat or more light than the ones called 'fixed' on the viewpanel.

Dusty eyed the star beacon suspiciously. Was it showing a disc yet? And how much time did he have to shift the drive once the disc became certain? Dusty felt a cold wave wriggle down his spine and he knew that cold beads of sweat were beginning to ooze out of his face; he was remembering the staggering speed with which the first star had come leaping at him.

ANOTHER star passed him in its characteristic wave of light and heat, and Dusty realized that what looked dangerously close on the viewpanel was in reality quite distant. It meant that so

long as his ship was pointed into a clear space, there would be no danger of running into a star no matter how precarious it looked.

But the cold sweat came because the beacon star lay winking at him dead in the intersection of the crosshairs that marked the drive.

Disc? Did it show a disc? Does Sirius show more of a disc than Polaris?

Dusty's hands pulled the 'Tee' bar slightly to move the winking eye ever so subtly upward. That way he would not be aiming his spacecraft dead into the searing hot maw of a variable star. He took a shaky breath and relaxed.

Gant Nerley shook his head. "I see what you are doing, Dusty, and you must not. You'll make a wide curve and get off the beam. Or worse, you'll hit a star lying close to the course. You have no idea of how wide you'll run. Center it up, Dusty, and keep a close watch, for it will become a disc. You'll have time. Relax."

Reluctantly Dusty returned the 'Tee' bar to the central position, and the star winked through the crosshairs at him, itself no larger in diameter than the width of one line. It was not obscured by the lines because of the construction of the panel, a design that Dusty could not quite understand. Dark lines should have hidden the stars behind them, but on this gadget they did not. He looked closer and found that the stars themselves lay on top of the lines rather than under them, and he wondered how they managed that stunt. It was, of course, a matter of design. Dusty's experience had been with small telescopes, but this device was not an optical device, so the simple laws of optics did not obtain. As he watched, the winking star became a winking disc and Dusty's nerves twitched.

When had the change started? Dusty realized that he had been half-hypnotized by the wink . . . wink . . . wink that meant both safety and ultimate danger. The disc was expanding rapidly, and as Dusty tried to move the disc to Line H-001, the edge of the winking beacon

expanded faster than the point of aim moved. He wrenched the 'Tee' bar hard and saw the crosshairs move sluggishly below the exploding circle. Then the beacon flashed past in a wave of heat far greater than any of the other stars, and he was blinded by the light for a second or more. But as the blindness died, there on Line F-312 there was a distant wink . . . wink . . . wink.

## X

**D**USTY gripped the 'Tee' bar and started to turn the ship toward the new beacon. His approach to dead center was ragged—he overshot and overcorrected, but finally he made it. And then with a burst of good sense, Dusty released the 'Tee' bar very gently and leaned back in his pilot's chair. The crosshairs stayed on their winking beacon.

Gant Nerley nodded. "Turn the presentation to 'Polar' again, and keep a sharp eye out for a slow beacon along Radius Q-103. You probably made a wide curve around that other beacon and you may be a bit too close to a gas field. You'd burn up in milliseconds if you hit it at your present speed. By the way, what color is the presentation now?"

"It's getting lighter. Sort of yellowish-white, like."

"Good. But if and when it begins to blue-up a bit you'd better let up on the 'Force' pedal by a notch or more. Competent pilots can run with their screen in the violet, but you're far from being a competent pilot." He saw the look on Dusty's face and added hastily, "I mean that you've had no experience in galactic travel, Dusty Britton. You're doing magnificently so far. We'd best take no dangerous chances, though, until you have driven interstellar craft as many hours as you've driven your own interplanetary ships."

Barbara made a choked sound and then covered it by saying, "I see the slow beacon, Dusty. Out there on Circle D-212, along Radius Q-103."

It was pulsing slowly, rising to full

brilliance over a period of more than a minute and falling again, never really winking out to invisibility. It lay alone in the star field; the gas cloud behind it must be of the same nature as any of the so-called 'dark nebulae' or dust clouds that obscure the stars behind it. But it was far to one side (Circle D-212) and it seemed reasonable to view it calmly.

"How much time have I?" he asked Gant Nerley.

"About fifteen minutes."

"Good. I want a cigarette and a drink."

It was with increased confidence that Dusty swooped around the next beacon and headed on towards the next—and the next—and then around a long curve-way limned by four of the winking beacons and once more along a long field-free course towards a winker that lay dead ahead for quite some distance.

There was one quick jog between two beacons set at an angle like the flags of a slalom run on skis; a wide 'S' curve around the outside of the first, up and over, between, then out and around the second beacon in a long ogee to locate the freeway to the next beacon star. There was a quick turn that took the plane-locating phanobeacon off the screen for several minutes and then another one that put the phanobeacon almost on the crosshairs, and then another slight turn that put the phanobeacon on the lower corner of the viewpanel again. It was, according to Gant Nerley, a "most remarkable rift!" At which Dusty shrugged because he had never seen any other rift. It looked plenty complicated to Dusty, and he shuddered to think of what a really tortuous galactic passage would be like.

They passed by a vast luminous cloud that lay on the spacecraft's beam for minutes. It looked like a matter of mere miles that separated them from it. It was marked by two of the slow-winking beacons, as if that were necessary. The luminous cloud reminded them of a lake, seen from an automobile driving along a highway they could not see the inner star that provided the energy for the

luminosity of the cloud, and eventually they left the luminous cloud behind them. They zipped between the elements of a star cluster that drove at them with multiple waves of heat, and on and on they went with Dusty Britton driving his Marandian spacecraft like a child running a motorboat, following instructions shouted by a careful, protecting parent.

THIS did not make of Dusty Britton a space pilot any more than turning the valve on a radiator makes one a heating engineer, or replacing a light socket makes one an electrician. But Dusty began to glory in it; his confidence grew high as his skill increased.

His touch upon the 'Tee' bar became light and sure of itself. He no longer waggled widely or jerked the bar when a deviation became noticed, Dusty corrected his course with deft touches like the driver of an automobile. He was learning, and filled with a self-confidence he had no right to feel, but did not know enough to be scared about. Dusty Britton, who had never been in a space rocket in his life, drove a galactic spacecraft across the galaxy under what can be called "Dual Flight Training."

Which was all right, so long as the trainee has enough space to make mistakes in. Dusty literally had galactic reaches and these were well marked against the pitfalls. And if Gant Nerley's face radiated confidence and his voice sounded cheerful it was due to Gant Nerley's knowledge that constant admonition, warning, and cries of horror would only cause more trouble than Dusty Britton's meandering course.

But flight is easy, whereas landing is the most difficult maneuver in the universe.

So by the time Dusty Britton was homing on the main phanobeacon of Marandis itself, Gant Nerley had his plans. Dusty Britton was not going to barrel that spacecraft down tailfins first like a screaming elevator that might come to Velocity Zero at a plus or minus a half mile from Ground Zero and maybe a plus or minus thirty seconds of Drive

Turnoff; to drop like a plummet or ram the spaceport with a planet-shaking crash or burn a crater in the port with full drive still warping the space below the ship's tailfin.

Dusty Britton came to a full zero-zero-zero landing a million miles above Marandis. He came to a grinding halt high above the planet, looked around dazedly, and asked Gant: "What makes?"

"Keep your drive at one gravity thrust," said Gant. "Stand by for Pilot!"

The last order was delivered in a ringing voice as though it were a standard procedure.

To Dusty, familiar with the tactics used by seagoing liners upon entering port, standing by for a pilot was quite a sensible practise. If the Captain of *The North America* permitted a pilot to bend the big liner along Ambrose Channel, through The Narrows and into New York Harbor, Dusty Britton saw no objection to having a pilot come aboard to bend the big spacecraft down past whatever dangers might be presented by moons, meteors and cosmic junk.

And Gant Nerley, not knowing how Dusty felt about spacecraft piloting, hoped that this procedure sounded like Standard Operating Practise.

Dusty replied in ringing tone, "Standing By for Pilot!"

Gant took a deep breath.

Minutes later a small scooter hauled alongside and a Marandian pilot came aboard and took over. He smiled at Dusty and said, "I'm Nort Wilgas, Pilot."

"Glad to have you aboard," smiled Dusty. It all sounded very familiar; The Space Patrol had borrowed liberally from the clichés of naval procedure and courtesy and he had been through these lines at least once in every picture. "I'm Dusty Britton." Then he remembered the role he was trying to play and added, "Of The Terran Space Patrol."

"Have a good passage?" asked Nort Wilgas.

"Yes. A bit tiring. After all, I've never driven a galactic spacecraft before. Frankly, I'm about flat on my face."

The Marandian pilot looked into Dusty's face with a perplexed frown. "You know," he said, "It's just occurred to me—you drove this thing all the way on duty!"

"Yes."

"Twenty-three hours!"

Dusty suddenly felt tired. He had been too busy with the board to think of it before. He had been running on nervous energy, but now it had about run out. Dusty had been this way before; so long as there was something that had to be done he had done it, but once the need was over, he invariably came unglued and slept the clock around.

"Yes," he said. "I had to."

"Man! What stamina!"

Dusty yawned and came unglued on the divan opposite the one that Scyth Radnor occupied: Nort Wilgas nodded at him and then turned to Barbara. "You can relax too. I'll take over."

Dusty Britton was fast asleep when the spacecraft made its landing on Marandis.

## XI

**D**USTY awoke to find the sunshine streaming in through a small porthole and lighting the cabin cheerfully. The smell of fresh air was in his lungs, a pungent, pleasant smell faintly of cinnamon or nutmeg but not quite either. He recalled that he had folded out on the divan in the salon, now he was in one of the cabins below the salon level. He wondered how he had arrived.

He stretched his muscles, the cool sheets felt pleasant against his back. Then he wondered who had undressed him and how anybody had been gentle enough to do the job without waking him. He looked around the cabin expectantly and as he looked, his door opened and a woman came in.

She was wearing white from cap to slippers and Dusty pegged her for a nurse at once. She was wholesome enough, but neither her face nor her figure would have stopped any traffic on Fifth Avenue. She carried a book with a finger slipped between pages to mark



her place and in her other hand she held the Marandian equivalent of a cigarette. A pleasant curl of smoke rose from the lighted end.

"Hello," she offered brightly. "And how do we feel this morning?"

"We feel fine," grunted Dusty. "And we'll feel better after a shower, a shave, and some of that smoke you're using. I'd also enjoy a change of clothing."

"We took the liberty of having your uniform cleaned. The shower and shaving gear is in the bath—there—and as for the cigarette, I can offer you one right now."

"Give," said Dusty with a grin. She handed him a case and snapped a lighter for him. He puffed and found that the stuff, while far from tobacco, was tasty enough. He took a deep puff and let the smoke filter out through his nose.

The nurse said, "I hope you don't resent sleeping in the—ah—"

"The raw? I do it all the time." Dusty took another puff and swung his feet overboard onto the deck. It was not deliberate, Dusty was just inhibited and the question of wandering across a cabin dressed in nothing did not even occur to him. The nurse said, "I'll be waiting for you in the salon." She left, not precipitately, but with a certain air that removed all embarrassment.

Dusty showered and shaved and dressed in his cleaned uniform. When he got to the salon, Barbara was there already, also freshened and cleaned.

"So this," she said, "is Marandis."

The nurse nodded cheerfully. "This is Marandis. You'll have to tell me how your Terra is; I've never been anywhere near that far from home, you know."

"Sure," nodded Dusty. "But now that we're on Marandis, what do we do next?"

"Oh. I'm to escort you to a formal meeting of the Bureau where you'll meet Gant Nerley face to face."

"How's Scyth Radnor?"

"Why, he's doing very well. He's hospitalized and he'll be out and howling for the skin of the man that shot him in about a week."

"He'd better take a month off for practise, first," grinned Dusty.

"Or," chuckled the nurse, "leave other men's women alone."

"Yes," agreed Barbara.

THE nurse nodded. "You're very attractive," she said with no trace of jealousy or envy. "I can see Scyth getting side-tracked along your direction. I am a little disappointed in Scyth—seems to me he could do better than a frauand for you."

"Better than a what?"

"Frauand. That bauble he gave you. You wouldn't know, of course, but it comes from Selira, a stellar colony not far from here. It's incredibly cheap."

Barbara tore the chain getting the bauble away from her. "Next time," she promised sharply, "I'll plug Scyth Radnor myself!"

The nurse shuddered a bit. Dusty merely laughed and said, "So now we know where we stand. And now knowing, I'm hungry."

"Of course. We'll all dine at the meeting."

"Oh?"

"Naturally. You're here, aren't you? Marandis is not going to send you back without a chance for you to present your case. There is a joint meeting of the Bureaus of Galactic Navigation and New Colonial Affairs. It will start with a formal breakfast during which no business will be conducted. Then, once you are all acquainted with one another, the business of the day will be discussed and a decision rendered."

She led them to the spacelock and Dusty Britton had his first glimpse of a Marandian spaceport. There was precious little to see, which made it even more stunning to the senses.

The size of the place was completely obscured by spacecraft which stood like the trunks in a pine forest. Most of the craft were larger than Dusty's and so obscured his vision. Between those nearby (which were rather wide-set) there were others at a little distance, and beyond them there were still others, and

behind those others were more and more and more until all that could be seen were the tips of the upthrust noses. The horizon was an irregular pattern of pointed shapes that was somewhat reminiscent of the Greek egg and dart moulding of ancient architecture.

Through some of the more distant lines of sight, the far spacecraft had a haze around it, as though it were miles and miles away.

There was not a building to be seen, only spacecraft.

Dusty gave up trying to penetrate the forest to the edge of the 'port and directed his attention to his nearby surroundings.

A road wound around in a zig-zag manner, meeting and dividing around each ship. There was an empty landing block not far from them, and after a bit of puzzled interest—the shape of the block caught Dusty's memory—he decided that the landing block was hexagonal. So were all the rest of the landing blocks. Hexagonal pattern, like the well-known hexagon tile floor; the road was the marker-lines between the hex-shaped landing blocks. Those that were empty showed the effect of heavy masses parked on them; a bit of char now and then; a chip or a crack, probably made by a rough landing; a deep seam repaired with some sort of cement or concrete (or whatever the Marandians had devised or discovered as a superior material) and at least one place where the edge of the block had been chipped deeply as though the pilot had missed his landing point and come down on the edge of the hexagonal block.

AS THEY looked, a muted whir attracted their attention and they turned to see a ship lowering itself out of the sky to come down in a slowing vertical drop that ended at the edge of a curtain of nearby spacecraft. The landing ship inserted itself in the pattern behind ships until only its nose was visible. Then to one side—and apparently with no warning, a ship nosed upward, gaining speed rapidly until it

disappeared in the bright blue sky above.

The nurse said, "We land a ship every thirty seconds. There's a take-off every thirty seconds, too."

"That is a lot of activity," said Dusty, swallowing the daily figure with some amazement—7,200 ships landing—a like number taking off—every hour, night and day. The traffic added up to a rather monumental figure. No wonder they required a huge spaceport.

"Marandis is the center of Galactic culture," said the nurse proudly. "And this is only the spaceport that handles affairs of the Space Administration Department. Each of the many Departments of Galactic Government has its own spaceport. The one at the Department of Space Commerce is the largest because that is the one that takes care of incoming transports carrying the necessities of living."

"Don't you do anything for yourself?"

"We have no room. Marandis is an urban planet. The only parts that are not built-up are preserves, parks and recreation-forestry. There is nothing on the entire planet that does not serve directly toward Galactic Administration, in one manner or another."

Dusty nodded. He could grasp this even though the magnitude was great. By simple proportion, if it took one complete city to administer the government for a country, it should take one planet to administer the government of a galaxy. He wondered even then how they managed to get it all in.

He smiled and made a wave at the landing ramp. He had seen everything he could see from the little platform outside of the spacelock.

At the bottom, in the zigzag road, was a lone, low-slung vehicle with a man in a simple uniform leaning indolently against the wheel. He was smoking a cigarette which he tossed onto the landing block as they came down. He fired up the thing under the nose of the car after they were inside, and as soon as the door slammed, he let the clutch out with a rap and the car jack-rabbed into motion. They took off from a stand-

ing start like a frightened deer at about five degrees lift so that by the time Dusty and Barbara had pulled their heads forward from the jerked-back angle, the car was about thirty feet in the air and arrowing forward above the road. The speed climbed rapidly until Dusty estimated something near to a hundred miles per hour.

The driver was, of course, cutting the tips of the corners between the hexagonal blocks in a die-true line of flight and naturally paying no attention to the zigzag road below them. Since the spacecraft were all standing in the center of their particular blocks, like a bunch of chessmen parked on a tile floor, there was plenty of space between the ships themselves for such passage. Even at their thirty-foot altitude, which raised them to a point on most ships where the bowed-out flanks were quite wide, there was room to spare.

And now that they were in one of the aisles, distant buildings could be seen dead ahead. It must have been ten miles from their landing block to the edge of the spaceport.

The driver barreled along this aisle with the self-assurance of any taxi-driver, hooting his horn now and then as they came to what seemed to be a major intersection of the zigzag road below. Dusty wondered worriedly what happened when two of these characters met in a draw, because the man seemed to pay no attention to any other noise but his own, which he made with great confidence, in the other guy.

Dusty was beginning to wonder about the need for any road below when his question was answered by a caravan of heavy trucks making their way along the road. They zipped over the caravan and were gone by the time Dusty realized that air-travel was not for heavy cargo.

**T**HE buildings at the end of the aisle between the spacecraft loomed larger. The driver whipped along at his thirty-foot altitude, making no attempt to climb over the buildings which were growing taller and more massive at a

frightening rate. Dusty's palms went wet; the buildings had seemed minute when they turned into the aisle, but now they were tall and massive and millions and millions of windows could be seen, with magnificent arches between the buildings spanning the gaps.

The air-cab whipped across an empty perimeter about the hexagonal-pattern of landing blocks, sped above a low building, and howled into the tiny space between two buildings with an arch above and a roof below, and then went into a flat climb. The car rose slowly in the canyon between the buildings that lined the street below. There were people working in those buildings, men and women that sat at their desks behind windows and paid no attention to the passage of a hundred-mile-per-hour skycab within forty feet of them.

Then the car was above the roof-level but it kept to the street-lanes. Below them were the streets, and in the valley was slow-moving traffic, ground cars and air-cars that ran at different levels to avoid intersection-collisions. Up in the higher strata were the fast-moving air-cabs, each moving in its lane, and each lane for a different direction. Even with separate lanes the traffic was a turmoil: constant jockeying to gain position, to avoid trouble, to move a level higher or a level lower so that a corner could be turned without entering the intersection at the wrong level.

To make a right turn the driver jockeyed himself to the top of the altitude allowed that line of traffic, and in the block before his turn he rose above his lane, made his turn, and then entered the right-bound traffic pattern from below, mingling with the speeding air-cabs. To make a left turn, the driver dropped to the floor of his lane, fell below, made his turn, and mingled with the left-bound turmoil from above their upper limit of altitude.

They raced along in the middle-altitude at high speed; cars above them, below them, to the left and right, before and behind.

"My God!" breathed Dusty, "New

York at rush hour—in three dimensions.”

Their driver turned and winked at them. He flicked a lighter with one hand and lit the smoke that was hanging from one corner of his mouth. “Yeah man,” he drawled. “Some of them guys should ought to take lessons.”

Then he turned back to his job with a shrug, lost a hundred feet of altitude in three hundred feet of run, and whizzed around a corner and fitted his aircab into a space between traffic that was just large enough to let him in without scratching paint. The other cars moved up, aside, down or sped or slowed to give him elbow room. He fought them for position, dropping on a descending run through this cross traffic until he whip out of traffic on a spiral over the roof-top of one of the buildings.

HERE the driver phlegmatically put the aircab into a tight corkscrew that dropped them onto the roof. Dusty got out slowly, testing the stiffness of his knees after the ride. He helped Barbara out next and the nurse came out on the other side at the same time.

Then they were almost roofed as the aircab took off on a flat, screaming ‘U’ turn that lofted him no more than ten feet, whipped across the street between levels and swooped him down on the opposite side, where he hit the other roof without a bounce and came to a fast braking stop beside a man who had flagged him.

The man got in and the aircab whiffled off the roof in a crazy climbing turn and burrowed into the fast traffic lane above. It forced its way into the mass of traffic and was lost in a matter of seconds.

“Holy Rockets!”

Barbara wiped her damp forehead with the back of a shaking hand. “Oh—for a film of this!”

Dusty grinned weakly. “Shucks, Barb. What’s a fender for if you don’t fend with it?”

Quietly their nurse turned from the spectacle and led them to a roof kiosk and down some steps into an elevator. . . .

The operator cut the ropes and let them drop slightly slower than the free-fall constant of the planet Marandis, leaving their stomachs somewhere up on the hundred and ninety-first floor. He braked the elevator somewhere down below-below-below, and their innards caught up with them in such a sudden rush it buckled their knees.

Along a magnificent corridor and through massive carved doors opened for them by men in uniform, and then they were ushered into a vast ornamented room with a vaulted ceiling, tapestried walls, and a polished floor. Deep armchairs were waiting around a huge table that glistened with polished metal and blinding white cloth, the severity broken by color of dish and fruit and fluid. Soft stringed music filled the air that was also lightly scented.

As they entered, the music bridged from the stringed fugue to a magnificent orchestration and the scent changed subtly from languid sweetness to a pungent aroma that compelled the senses to pleasant attention. The soft-key lighting swirled across the vaulted ceiling and changed into a colored brilliance that made the blood leap high.

The music slid into a soft passage and a vibrant voice announced:

“Dusty Britton, Commander in Chief of The Junior Division of The Terran Space Patrol. Barbara Crandall, Thespian and Vocal Musician of Terra. In attendance, Lela Brandis, Mistress of Extra-Marandanian Medicine.”

The music crashed, the scent came heavy and sharp, and the lights flashed like the licking of summer lightning and came to rest outlining them brilliantly.

Gant Nerley crossed the huge room and held out his hand to Dusty Britton.

“We need no introduction, Dusty Britton,” he said in a ringing tone. “I say ‘Greeting’ to you with all my heart!”

Another stab of music, a touch of cinnamon-scent, and a play of lights.

Gant Nerley turned. “Stop the dramatics,” he commanded. “What are we, children to be impressed by theatrical tricks?”

The music shifted back to the string ensemble, the scent smoothed out to something pleasant and pungent, and the lights faded back to their neutral medium-key. Dusty thought that if this lights-and-music stuff was strictly off the cuff, ad-lib, someone was a past master at the art of extemporaneous composition. He liked it. And if it took Marandanian children to appreciate it, you could give him ten years in school and call him the Marandanian child.

Gant Nerley was holding out an elbow to Barbara. She took it and the Marandanian led her towards the head of the table. Dusty looked around; then he offered his own elbow to the nurse—Mistress of Extra-Marandanian Medicine, Lela Brandis.

It was many years before Dusty identified the things he had for breakfast. It was exotic and well-prepared; none of it was remotely familiar but all of it was good.

Then over the after-dinner drinks and smokes, Gant Nerley rose, rapped the table with his knuckles, and proposed the problem for the day.

**WHAT** are we going to do about Sol?" asked Gant Nerley seriously. Dusty eyed the Marandanian soberly. "Leave it alone, I hope."

"You realize what you are asking?"

"My God! Do we have to go through all that mishmash again?"

"Again?"

Dusty slammed the table with his fist hard enough to make the glassware jump. "Again and again. I'm getting sick and tired of explaining all the many reasons why none of us want to move to another star and lose a thousand years. And then being told that after all it won't hurt a bit, and besides this move is necessary—and if we don't move willingly we'll be moved anyway forcibly."

"Why are you so angry?"

Dusty looked at Gant Nerley and sat down wearily. "Because," he said patiently, "all of us know that no matter what, you're going to go on and do it anyway—but not until you've forced

yourself to believe that you have convinced us that we should accept this kick in the pants gracefully."

"It isn't that simple."

"No?"

"No, it isn't. You see, we are bound by our own laws to hold to certain programs under certain conditions. It is the conditions which prevail that we are attempting to define, outline, determine, and pin down so that we know what lawful action may be taken."

"You sound like a bureaucrat explaining away an awkward situation. Just what do you mean by conditions and programs?"

Gant picked them off on his fingers. "There are the following," he said. "First would be a race—remember I am talking about all the races of mankind strewn across the galaxy; the races that are us, you and we and all the rest that stem from a single source, the origin of which is lost in the antiquity of a hundred thousand years. So, first would be a race which was still in the growing-up stage, say the mound building, early agricultural, perhaps later, in early metal. An age of no true scientific grasp; what little of science they know has come by guesswork, blundering discovery and hit-or-miss experiment. Such a race could be moved across space without a qualm, because it would only bring about a rather deep period of superstitious horror and a religious fear. A few hundred years later the tale would be completely discounted, because the astronomers would be rising and stating flatly that no agency in the universe could change the constant stars. The old sky would be wiped out of men's memory in a couple of generations, although it might remain in myth and fairy tale for a long time. Such a set of conditions would permit the moving program without a qualm."

Gant looked at Dusty. "Understand?"

"Sure," replied Dusty indifferently. "Go on."

"Then on the other end of the scale we have the advanced race. They have discovered the phanobands, know about

space flight and perhaps have colonized the planets of other stars say within ten to fifty light years. A race of this stage of development would understand and grasp the problem quickly. Then having been shown the problem, they would make the move willingly and no doubt help, because they would understand that their destiny is a part of the Galactic Destiny."

"Oh, yeah? You mean to say that if Marandis were found to lie across the road like a stone wall you would all happily toss Marandis into a barytrine field for a thousand years?"

GANT smiled serenely at his objection. "Well, doubt it as you will, but we would. Of course, we know that no such case would ever come up. But if it did—"

"Y'know what you remind me of," snapped Dusty. "You remind me of a parent explaining to his kid that this castor oil is good for the kid, and that if the parent needed it he would take it with a happy smile—excepting of course that the parent does not need anything of that nature. We have an old adage: he dies well who never faced a sword! I think it applies here. Well, go on, Gant. Tell me where Terra lies in your scale of values."

"That's what we are trying to determine. You are obviously not of the pre-aware stage. You have your limited space travel and your historical records which will preclude any attempt at forcing the affair upon you and causing you to put the change as superstition that would be wiped out."

"Thanks."

"On the other hand you are not of the advanced stage which could accept a change in your night sky without trouble, nor will you accept it willingly."

"How true. Now this brings us to the impasse, doesn't it?"

"Yes."

From across the table a man waved for attention. "It's more than that. The moment Dusty Britton opened the distress phanoband, the secret of the galac-

tic rift was let out. Like everybody else, we put direction finding equipment on the signal and have it located rather well. Then we went back through our files and found that as far as we can tell, Sol was mentioned as a possible beacon by one of our early exploratory parties. One that disappeared. One that—"

"So what?" barked a man down the table from Dusty. "Seems to me that Intercluster sits on its duff and waits for us to find rifts for them."

"Transgalactic isn't the only outfit with a spacecraft," snarled the man from Intercluster angrily. "We've done our share."

"Not on my books," said the Transgalactic representative.

Intercluster eyed Transgalactic sourly. "What's the matter?" asked Intercluster softly, "Are you mad because Intercluster happens to have records on the rift you re-discovered?"

"Re-discovered my—"

Intercluster turned to Gant. "I leave it up to you," he said. "Our records show that we, too, have rights to this rift."

Transgalactic hammered on the table. "Like hell!" he roared. "If you have rights, why aren't you using them?"

"Because you and your gang concealed them from us until Scyth Radnor got into trouble. A fine bunch of incompetents you are! A fine group to be representatives of our culture. You can't even keep your hands off native females—"

Barbara rose with a single lithe motion and hurled the contents of her glass in the Intercluster man's face. He staggered back, floundered back into his chair, landed hard and tilted it back on hind legs to go over backward in a crash.

"Native female?" spat Barbara.

The room went breathlessly silent; the music stopped on a flubbed note; the scent soured in a brief wave as though the man at the valves had miscued. The lights flickered awkwardly.

Barbara stood there tense and ready. Her breasts were pushed against the nylosheer of her dress; her stomach was flat and hard. She was poised like



a healthy wild animal daring any onlooker to try to tame her.

Dusty rose lazily and pushed her back into her chair with a hand on her shoulder. No other man in the room would have dared to lay a hand on her except Dusty. This he somehow realized, and it gave him personal gratification to know that he had once more done that which the Marandianians would not have dared.

Then he went over and picked up the Intercluster man with one hand, standing the man on his feet like a puppet.

"We apologize for reacting to your unfortunate choice of words," he said smoothly. "We admit to being a bit primitive and impulsive. I came unarmed," and he pointed to the band across his hips where the Dusty Britton Blaster belt had protected the whipcord from the sun, "because we are advanced enough to realize that we are impulsive and perhaps a trifle inclined to act before considering the matter fully."

HE TURNED away from the man and sauntered over to Gant Nerley. "I apologize again," he said. "But I do suggest that our nerves are a bit short. After all it is hard to sit here and listen to your friends and fellow-citizens discuss the ways and means of making use of that rift through the galaxy without once recognizing that we poor devils have to move out whether we like it or not."

Gant smiled nervously. "I am trying to appreciate your position," he said. "And in a way I do. But you must try to appreciate ours. We are not taking anything away from you that you will miss. After all, Dusty, what do you stand to lose, really?"

Dusty swallowed. It dawned on him what he was doing and why. And also how he had managed to get away with it so far.

And in these fractions of a second, Dusty probably matured more than he had grown during the great part of his life.

He realized suddenly that he was only

Dusty Britton of The Space Patrol and as phony as The Space Patrol itself. To date he had done as good a job of wool-pulling as the best statesmen or scientists, but only because he was an actor. He had succeeded in convincing the whole bunch of them that the cultural level of Sol was higher than it was. A scientist would have admitted his lack because that was the way scientists operate. A businessman would have been baffled, and a statesman would have tried to cover his indecision in a gout of flowery language that would be known for what it was by this bunch of high-brain characters.

But Dusty was an actor, blunt and not too smart. Modesty is not part of an actor, while the ability to submerge himself is. He had become Dusty Britton of The Space Patrol and the hero of a hundred adventures in space among a people who were hard and fast because they were still in struggle against their environment. He was tall and strong and young and handsome, and he was Dusty Britton, fast on the draw, hard on the trail, and the bes' dam' cabbayero in all Mehi-co and he had them all convinced that he and his friends spent their time racing around in dangerous, imperfect spacecraft powered by reaction motors.

He was Dusty Britton who had plugged Scyth Radnor for playing games with his woman. Then Dusty Britton had taken the controls of a completely foreign spacecraft and had driven the ship half-way across the galaxy through danger and God-knew-what (Dusty did not) horrors and possible fates. The fact that Gant Nerley and a corps of engineers and a bank of computing machines had supervised Dusty's every motion and move did not detract from the feat in their eyes. It added, because of the sheer guts of a man who would enter an alien ship and have the self-confidence to touch the tiniest push-button.

He sauntered over to Gant Nerley and said, "Well?"

Gant Nerley was impressed with Dusty's swagger and self-confidence. So

were the rest of the men in the room, with the exception of the representatives of the two shipping companies, and they had chips on their shoulders. So Gant Nerley looked around from face to face and then said, in an official tone:

"It would appear that Terra is of a level of development that mitigates against immediate action. Therefore we shall declare a recess, during which time we shall study the Terran people. If Terra measures up, other steps must be taken."

There was a chorus of "Aye!" and the sound of chairs being pushed back and the noise of feet on the floor. The babble of voices arose as the members broke into little groups and began discussing the problem.

But Dusty did not hear them. The self-confidence had oozed out of him and he slumped in his chair, staring at some shine on a bit of the table silver, trying to think of something other than the horrible certainty. For while Dusty Britton had bluffed the Marandianians, he knew without a shadow of a doubt that his bluff was being called and it would not stand up. All it would take was the Marandianian Investigating Committee scouring Terra to find one single man who had one shred of reason to believe that matter could exceed the velocity of light. Oh, there were such people. But the man who professed such opinions believed it because he wanted to believe it; because he hoped someday that it might be accomplished. He was the man who shrugged off experiments that followed the rules and acted according to the equations. He was the man who had faith but no proof.

**B**YOND a doubt, the report of any such committee would recommend that Terra be bundled into its barytrine field with no delay, and that Sol be nudged into the three-day variable needed for the beacon on this particular dogleg of the journey across the galaxy.

Dusty had succeeded in his own way, but now he knew that it was not enough. He, himself, had convinced them that

Terra was worthy of notice. The rest of Terra would let him down. Still lost in his own unhappy thoughts, he became vaguely aware that the babble of discussion was stopping and that one man was raising his voice to get an audience.

It was the Transgalactic representative. He was standing by his place at the table, talking in the tone of voice used by a professional lecturer hammering home an unpleasant fact:

"—obvious by the animal ferocity of this Terran, his threats and his willingness to plunge into physical combat, that he and his kind cannot be of high culture. I am asked whether or not we may judge an entire race of people by one man, and I agree that we cannot. But then view the reaction of his companion who flares up in a fit of red, raw anger, taking offense at being properly catalogued. I ask you, gentlemen, is there any excuse for this? Am I not a native male of Marandis? Is she not a native female of Terra?"

"And so by their actions, both violent in nature and unpredictable in direction, they have shown themselves to be uncouth. Who knows what offense they will take next? Does a man among us dare to speak freely with either man or woman of Terra alone and unprotected? No, because no one can ever know beforehand what peculiarity of their own limited semantics will be rubbed the wrong way, setting them into a violent fury. Dusty Britton has boasted that he can take any of us out and wipe up the street with us. This cannot be denied. But what does it prove? Only that his shoulders are broad and his back strong and his fists hard. And that he has been trained in violence.

"Now, gentlemen, consider this next argument: What has Terra to lose? No more than a familiar night sky, really. The time under the barytrine field will pass without their notice. As for the time lost in respect to the rest of the galaxy, since they have had no contact with it, they cannot be affected by the loss. They prate about losing a thousand years of advancement. Consider

how soon they would be taking to space if we had not found them. Might it not be yet a thousand years before contact with the galaxy took place? Yet as it stands now, this man and this woman will live to see galactic commerce, whereas they would be dead and gone without ever knowing of the galaxy if Marandis had not found them. And having been granted that, they still show the ignorant rebellion of children.

"They have not the foresight to understand that so far as they are concerned, less than a week of their apparent time will pass before the ships and men of Marandis will land on Terra in its new surroundings, to treat with them, to lead them, to educate them, to bring to Terra all of the glories and benefits of galactic civilization—no, gentlemen, *to return to Terra its galactic heritage, lost so long ago. It's birthright returned!*"

"And yet what response do we get? Objection and rebellion and threats of violence. So I ask you, are we to be frightened by this small primitive world that lies like a barrier across our path? Are we to be cowed by a show of force? Are we? And if we are, shall we run in fear from a race of men who bear missile-propelling weapons?"

"Look at Dusty Britton and his companion. They sit there angry, possibly planning their own form of revenge to take place if we have the temerity to proceed. Then let me ask you, supposing they do object? Suppose they do resent our meddling in their small lives? Are we to be frightened of bomb and gun—we who can put them back into their barytrine field and keep them there until they are willing to agree? *And without the loss of a life?* Gentlemen, this whole meeting reminds me far too much of parents who try to argue logically with children over bedtime instead of packing the infant off. Who knows what is best? Child or parent?"

THE man from Transgalactic paused a moment to let this point sink in. Then he said, "Gant Nerley, I object to your proposal. We need no more inves-

tigation. We know what these Terrans are and how they react. They offer little to Marandis at present. They are no more than a responsibility to us and as such they owe us our superior rights. Therefore, unless I am ordered at this moment to cease and desist, I am going to proceed. Do I hear such an order?"

A babble of voices rose.

"Gentlemen," said Transgalactic, suavely, "I offer you a short and quick route to the Spiral Cluster."

He stood there for fully a minute listening to the clamor of individual discussions going on in the smaller groups around the table. Then he hit the table with his fist, bowed sardonically to Dusty and Barbara, and strode out.

Dusty looked at Gant. "Can't we do something about this? Can that guy go do as he pleases?"

Gant shrugged. "We are a government that guides but does not rule, suggests but does not demand, recommends but does not force. I can and will put a stop to his activity providing that you show direct evidence that Terra and Sol are of importance in their present location, that Terra has something to offer Marandis, that you are not what he claims. However, if what he said is true, then what he is about to do is acceptable."

"But we—" and Dusty stopped short. He had no argument strong enough to convince this Marandanian that Terra would lose anything but its own jealous prestige.

Dusty stood up slowly. "Come on, Barbara, let's go home. At least we can be among friends. I'd hate to be marooned here while Terra was smothered in the barytrine field."

Barbara stood up and leaned against his side. "Yes, Dusty," she said in a throaty contralto.

Gant smiled wilyly. "I'll see that you get home," he said. "Forgive us, Dusty. You'll really lose little and gain much. I—"

Dusty looked at Gant. Then he looked down at Barbara. Then up at Gant again.

"So I've failed," he said in a low voice. "I've tried and failed. And I am aware of the fact that Terra will not lose much. That isn't the point. It's just that I, Dusty Britton, am a personal failure. I should like to be able to say that I don't give a damn what other people think, but I can't. I care a lot what other people think, because for the next forty or fifty years or more I've got a living to make, and making a living is a lot easier if the entire world is not convinced that I am a no-goodnik. But then, who am I to stand in the way of galactic progress."

"Dusty, I regret that the rest of your people will not be able to see the thing I am going to show you. Maybe you can describe it when you return. Come with me."

Gant led them from the hall, then to a moving walk that hurled them out and across one of the flamboyant arches between buildings. Here Gant stopped to display his credentials to a man in uniform, and to sign a register that also listed Dusty and Barbara and their home planet Terra.

They went along a corridor that curved gently; through a heavy metal door that opened on response to a signal sequence delivered against a button.

The room inside was vast, truly vast. It was a vertical cylinder and it must have been more than a thousand feet in diameter and three or four hundred feet tall. They stood inside of the door on a narrow metal catwalk that ran completely around the circle, its far side lost in the distance and the dimness, for the room was not lighted from above, but from below.

It was a pleasant glow, a flat hazy, wispy glow from a gas-like cloud that floated in the room a hundred feet below the catwalk . . . a scale model of the galaxy.

**I**T LOOKED like any photographs of one of the galaxies taken through a telescope except that this model was dotted here and there with winking pinpoints and stringed through and through with thin lines that glowed in many col-

ors, some solid colors and some in a two-color spirals, like coded wire cable. Here and there were faintly glowing spherical volumes containing many stars, or rectangular volumes confined by planes of faint color-glow. Certain of these clusters were linked with other clusters by the zigzag lines that wound and interwove around and through in a tangled skein.

Gant Nerley picked up a small cylinder from a rack on the railing of the catwalk. A narrow pencil of light pointed out, and he aimed it towards the center, some five hundred feet out to the middle of the hall. "Marandis," he said. Then he brought the pointer-light across towards them slowly, to stop a hundred feet from their position. "Sol," he said. "The lines are courses surveyed and registered by the various companies, you can gather that the colored stars are our inhabited systems and the volumes register certain clusters. That faint greenish-yellow course that ends out there by Sol is the Transgalactic course set up to reach from Marandis to the Spiral Cluster which lies almost at our feet."

The magnificence of the spectacle was enhanced by the silence in the room. The galaxy, it seemed, lay at their feet and with no irreverence, and only awe, the viewer felt as though he were standing by the side of God, looking down at his Work.

In a hushed voice, Dusty asked, "Is this where they survey the courses? Couldn't figure out a way around Sol?"

Gant laughed sympathetically, breaking the hushed awe. "Look at it and think, Dusty Britton."

Dusty looked, and Barbara looked, both in awed silence as Gant Nerley went on:

"In that model, which looks like a wisp of gas, there are fifteen billion individual pinpoints. Think, Dusty. One-five, comma, zero-zero-zero, comma, zero-zero-zero, comma, zero-zero-zero stars in one galaxy. Across the breadth of this room it lies, scaled down to represent the hundred thousand light years of its diameter at the rate of a hundred

light years to the foot. Eight and one third light years per inch, Dusty Britton, so your Sol and your Sirius lie about an inch apart. Now, Dusty, in order to make the stars visible, they must be above a certain intrinsic size, and in the size of the stars the scale of the model is violated. Each tiny glowing point is about one-sixteenth of an inch in diameter. That makes the scalar size of the stars about a half light year in diameter. The diameter of the colored lines that represent courses is of the same magnitude, so as we go into the model—as we may—we will find that the courses touch, intersect, and lie tangent to stars that are actually far from the flight in real space.

"What I am saying, of course, is only a new concept of something that you already know, but pertaining to another subject with which you have every right to be more familiar. Take a globe of your Terra. It is excellent for locating areas, finding cities, lakes, oceans, mountain ranges; anything gross enough to find physical size upon the map. But you cannot use it for a road map to direct you to the home of a friend, because the details of such a trip are much too fine. So we use it for large-scale mapping, but could not possibly use it for the delicate business of course mapping."

"But if you enlarged a section?"

Gant Nerley nodded. "It has been tried. No good. You see, Dusty, this was made by going deep into space and making stereograms from all angles. The transparencies are used in projectors all around the hall. But as you may know, the finest photograph loses definition when it is enlarged too much. As for delicate operations, Dusty, just to prove our point we are going to enter the model.

Gant led them to a control panel in the railing and from a sheet of paper in his hand he set the dials.

**T**HE vast circular runway lowered all around the hall and the galaxy-model rose, giving the appearance of turning upward past them. "We are coming

down toward and below the plane of our galaxy at the scalar rate of about a hundred thousand light years per minute," said Gant. Then a segment of the catwalk detached from the wall and went forward on a long girder.

The bright pinpoints leaped out at them, giving Dusty the same feeling as he had had in the space flight, except that the model lacked the waves of heat as the little pinpoints passed. He looked at Barbara and watched the tiny points plunge into her skin to disappear, then reappear behind her, as if they passed through her body harmlessly. He looked at his hand as the points streamed through, and he wagged his fingers around a cluster and watched them twinkle. They penetrated clusters and dark-cloud areas, placed where fifty stars occupied a volume of less than a couple of cubic inches, spots where dusky, shapeless masses represented globs of fifty light-years in diameter. Rusty caught on. Thoughtfully he looked at Barbara and made a rough computation that he and she were a couple of hundred light-years apart. His eyes, he thought, must be about thirty light-years apart, and the diameter of his head, at eight and a third light-years per inch—

Dusty began to feel light-headed.

Through and through the model ran the colored lines, tangled and skeined and then they were facing the point where the greenish-yellow course-line ended.

Above the control panel was a faintly glowing sphere about two inches in diameter.

"Sol?" asked Gant.

Dusty shrugged. "Sol? How can we—"

He leaned forward and set his right eye close to the pinpoint of light and looked outward. Was it—could it be—familiar. He changed his angle of sight. Was Galactic North aligned with Terrestrial North? Dusty could not remember. The center of the Galaxy? Somewhere in or near Saggitarius, he believed, but Dusty was not familiar with the constellation. There! Was that the Belt of

Orion? It looked strange, distorted. The constellation as he remembered it of old, was not like that. Pinpoints, of course, could not begin to look like these tiny discs, or vice versa. Was it this that made them seem unfamiliar or was it that he was displaced in scalar space by enough light-years to distort the constellation? Was that—there—Polaris and the Dippers, large and small and Andromeda? Or, thought Dusty with wry self-disgust creeping into his mind, was that *W*-shaped thing Cassiopeia? He wished that he had paid more attention to astronomy.

Pleiades? He shook his head. That was a cluster and unless one remembered very carefully the configuration as it looked from Sol, the conglomeration of stars would probably look about the same from the same number of light years from the opposite side.

Sol—if that sprinkle of glow were Sol—must be near bright Sirius. An inch away and a double star. And Alpha Centauri should lie about a half inch from Sol and it should be a fine trinary; two bright ones in a binary and a less bright one making the triple. And Procyon—or was that only a single like Sol? He ran through his sorry list of stars remembered as being within fifteen or sixteen light-years of Sol, and was appalled to see the number of pinpoints that were surrounded by that tiny sphere that represented the sixteen light-year diameter. His mental catalogue had holes in the listings—more hole than listing, he considered truthfully.

**C**ONFUSED thoughts and vague remembrances plagued him. Wearily Dusty shook his head. For here, up close to the sprinkles themselves, he knew that they were not scaled. How could the scale show a binary when the size of the stars was scaled at a half light-year in diameter? If that bright one were Sirius as he supposed, it was a single blob because Sirius and its companion were quite lost in the half light-year diameter of the glowing spot that represented the system. And so, of course,

was Centauri. No, one could not scale a hundred-thousand light-years down to a thousand feet and hope to retain enough detail to calculate a course.

He nodded unhappily and looked along the green-yellow line that ended at Sol and realized that at least at one place in the course there was a change of direction that was so shallow that the diameter of the line representing the course was so wide that the ship, in actuality, only traversed space from one side of the line to the other, changed course, and returned to the first side.

Dusty leaned forward again, looking along the yellow-greenish line that marked the Transgalactic course. At the far end he noted the wink . . . wink . . . wink of the star beacon, not much different than it had appeared in Scyth Radnor's spacecraft. "Where," he asked, "does their course lead from Sol?"

"The prospectus, of course, is not shown as finished," said Gant. "But we can show it momentarily." He pressed a button and a dotted line of yellow-green flashed into view, extending from the end of the solid line out and out until it was lost to their view through the star field toward the outward Spiral Cluster.

Dusty looked at the line. "I suppose it isn't to scale or anything," he said. "But I can't help hoping—Gant, look, suppose this model were truly to scale, couldn't they save themselves a beacon here?"

"Save a beacon?"

Dusty nodded and the little speckles blinked at his eyes. Gant shook his head. "This model was built in the hope that we could play gods standing in our galaxy with a measuring stick. We failed because we are no nearer to the stature of gods than this model is to the stature of the galaxy itself. We cannot play gods, Dusty Britton."

"I'm not trying to play God," said Dusty solemnly. "I'm just thinking that if you can move a planet away from a star you want to convert into a three-day variable, you might be able to take your barytrine field and slap it around this star here," Dusty pointed to one with a



forefinger, "Then you move it aside and that gives you a long run from this beacon to that beacon—missing Sol by a full inch, or—eight-and-a-third light-years."

Gant blinked. Slowly, he said, "Move the star—" and let his voice trail away into a mutter. "Move the interfering star—" he repeated again. "Then—my Lord!"

"What's the matter?" asked Dusty.

"Yours is the glimmer of an idea that makes for the birth of a new concept!" breathed Gant. "Take it from there, Dusty. Don't you see? Move a star and straighten out one dogleg, move two and iron out the course even more. Maybe we could drill a free channel completely through from Marandis to the Spiral Cluster. Maybe from Marandis to Star's End, to Vannevarre, to Rescrustes—perhaps from Laranonne to Ultimane across the whole galaxy, a hundred thousand light years of free flight without a change in course. I—"

A tiny spot of light came crawling along the yellow-green course to disappear into the tiny pinpoint of light that represented Sol.

Gant said, "That must have been Transgalactic, returning to Sol to—" then Gant jumped. "Dusty! Come on! There's no time to waste!"

He hit the buttons on the control panel viciously and the little flying catwalk swung noiselessly back across thousands of light-years of scaled distance to fit into its niche once more. The circular catwalk rose high above the wispy model to its former position.

### XIII

**I**F COURSE Dusty had expected there would be quite a difference between his handling of Marandianian spacecraft and the professional. But he did not realize how great this difference was. In a larger ship than Scyth Radnor's, spearheading a conical flight of twelve more ships, he rode behind the pilot and admired the smoothness of the man's operation.

The color of the plate was high in the blue-violet and the stars leaped out of their background to whip past with hardly a flick. Beacons fairly buzzed and they grew into flaming balls and were gone behind as the pilot moved the 'Tee' bar with a deft motion of one hand and used the other hand to flick back and forth across the controls, changing the viewpanel co-ordinates and adjusting the various factors for flight. He skirted gas-fields dangerously close and zipped between the cluster by the double zigzag with a swaying motion, then humped the spacer down tight and made a dead run for it.

And behind him in a cone came the rest, in tight formation, conically arranged below the leader in tiers, three, four, five.

They soared around another beacon, its flashing fire bright blue and the coronal glow reaching out for them, and then the pilot was calling out numbers and a man at the computer was punching keys. On the viewpanel before them lay another beacon, winking . . . winking . . . winking.

Behind them, a continuous tape was running through the recording machine, playing its words on the phanoband communication channels: "Calling Transgalactic. Government Priority and Emergency! Calling Transgalactic! You are to disable your barytrine generator, you are to discontinue all operations at once! By Order of the Bureau Of Galactic Affairs!"

A man sat tense in his chair peering at a greenish screen that had a halo-spot in the middle. The halo was growing larger, but so slow as to be almost steady. The man held a micrometer thimble between his thumb and forefinger and was turning it slowly, keeping a pair of dark lines tangent to the bright edge of the halo. From time to time he would call out a figure which another man would pluck out on a keyboard.

"Why don't they answer?" breathed Barbara.

Gant smiled sourly. "Because they are going to go through with it if they can."

"But—?"

"They have every legal right to maintain communication silence, even though at the present time there is small point in maintaining secrecy about this rift. Their legal position is one of fair safety; one cannot be convicted of disobeying orders that one does not hear."

Dusty eyed Gant angrily. "You mean to say they can't hear that signal?"

"Of course they hear it. But can you prove that they hear it?"

"On Terra we have a maxim that ignorance of the law is no defense. This is to keep people from shooting people and then claiming that they didn't know that shooting people was forbidden by law."

"Very sensible. We have the same laws and the same interpretation," smiled Gant. "But in this case we have a different situation. As of the last acknowledged contact with Transgalactic, and specifically that part which is dealing with Sol and Terra, they had every right to proceed. The law has been changed. Now it is up to the law to see that the change in law has been properly delivered to the interested parties and that the change is acknowledged. Follow?"

DUSTY nodded. "*Ex post facto* sort of thing. If you pass a law forbidding neckties on Tuesday, you cannot arrest a man for having appeared on Monday without one."

"Right."

"But this is already Tuesday."

"But to be effective, newly-passed laws must be properly posted. Then must be acknowledged from the farthest point in space. And Transgalactic is playing communication-silence."

Dusty grunted angrily. "And that was the character that velped about our vengeful nature? Isn't he guilty of the same?"

Gant Nerley nodded. "Of course! Aren't we all of the same cut of human?"

The phanoband signal went on:

"Calling Transgalactic! Discontinue all operations by Order of—" and so forth.

The squawk box on the wall said, "Calling Gant Nerley with report."

"Report!"

"Report slight increase in phanoradiation high in the subnuclear region. Cross semi-collateral traces indicating an increase in lower-level nuclear activity."

The squawk box clicked off and Dusty looked with puzzlement at Gant Nerley. "What was all that?" he pleaded.

"He means that Transgalactic is hard at work. The lower level of nuclear reactions has increased in intensity, meaning in simple prediction that the business of making a variable star out of Sol is under way."

The Marandanian with the filar micrometer on the barytrine detector grumbled. "It's going to be a bit rough."

"Why?" asked the pilot. "If it weren't for that barytrine we'd never find Sol out of that mess dead ahead. We'd be canvassing the stellar region around there for weeks if we didn't have a focal point—"

"I know," grunted the detector operator. "First you need a barytrine field large enough to make a homing run on, but then once you're home you'll want a tiny one so you can locate the generator precisely. Well, you can't have 'em both, Jann."

Jann Wilkor shook his head. "I wish I'd made this run before. I could make it faster."

Gant pointed at the screen and nudged Dusty. The color-scale was still high in the blue-violet and there were a couple of places on the viewpanel that were a dead black, tiny spots that did not move as Jan Wilkor's delicate touch corrected the course. Spots burned out of the substance of the panel like over-exposed film burned through.

"It takes a master pilot to make a run this fast. Even so, we're taking a rather high risk. But if the channel was free and open from Marandis to Spiral Cluster, with only a big phanobeacon at either end, we could make it with the screen burning black-violet. We may even have to develop a new supraradi-

ant material for ultra-high velocities."

"How fast can you go?"

Jann Wilkor soared around a beacon and centered on the next before the flicking wave of heat was gone. He did it easily and with the negligent reflex of the master pilot. "Fitt Mazorn took one of the high speed jobs into intergalactic space for a speed run a year ago and claims to have made it from Larannonne to Ultimane in slightly less than an hour. "Or," corrected the pilot, "an equivalent distance, out in deep-deep space. Some of this is probably guff; I doubt that he could do it. That's a hundred thousand light years per hour and just a bit fantastic. Trouble is that the phanobands propagate at a finite speed, according to Hahn Tratter, and therefore the true velocity is difficult to check, since no one has been able to measure phanoband velocity."

"At any rate, it's fast," said Dusty, who did not understand half of what the pilot said.

Gant nodded. "It's fast. It's what we'll be doing in your clear channels, Dusty. That will make you rich and famous, that idea of yours."

"Ifing and providing we can get there in time."

"No matter. If Terra is lost to you, you'll still—"

"Look," said Dusty, "if that bunch wins out, I'll—"

"And I won't blame you," replied Gant.

There came a double report. The man on the barytrine detector said, "Barytrine field just went into the second phase," at the same time that the pilot said, "Last lap!" and turned his point of aim around the beacon to center the hairs on a small star that did not wink.

"Our next problem is to scour Terra inch by inch to find their barytrine generator," said Gant worriedly.

Dusty groaned. He thought of the trackless wastes of the planet; the Upper Amazon jungles, the tundra of Alaska and Siberia, the hidden reaches of Africa, high Tibet, and for that matter the cornfields of Iowa and the

wheat fields of Saskatchewan. The fathomless, staggering area of the sea bottoms was too vast a hopeless search-problem to contemplate.

GANT looked at Dusty. "It's bad, Dusty. I'll not fool you, but it's bad. We have perhaps a day or two, perhaps three. We're late. By the time we arrive the phase-two growth will be heavy enough to cause leakage-reaction in our detector and render the detector completely ambiguous."

"Meaning what?"

"What I said. That we must scour Terra inch by inch. And here is where you must help."

"Me?"

"Yes. You must issue orders to your Space Patrol to comb the landscape. You must find that barytrine generator."

Dusty looked at Gant Nerley blankly. "You realize what you're asking? That within a matter of hours we must set up a land-scouring search and completely cover the entire earth? I haven't even got the foggiest notion of how many million square miles of earth there are, let alone the ocean-bottom which we couldn't even touch, lacking the equipment."

"They wouldn't plant it on a sea bottom."

"No? Look, Gant, remember that they're planning on keeping this thing running for a thousand years. They'll have to hide it good."

Gant shook his head with a wan smile. "Not at all. You forget that so far as anybody within the barytrine field is likely to see it, the total time will be from right now until the field goes on in a few hours. Then the enclosure-time will elapse instantaneously for those within. Anybody who finds it once the job goes on will find it after you have been freed of the field. The chances are high that they've dropped it in some comfortable climate, possibly near a large city, just as Scyth Radnor did."

Dusty eyed Gant sourly. "For the same purpose?" he asked.

"Probably. After all, Dusty—" Gant let the statement hang, suggesting silently that Dusty was the kind of human who would think of the same thing and act on it. "So you must issue orders to your Patrol—"

Dusty grunted. His Patrol? Discredited, his position shot to bits, his public appeal running somewhere near absolute zero, who would even listen to him? His former admirers had shucked their Space Patrol clothing for the costume of Jack Vandal, Space Rover.

Then he sat up with a puzzled smile. "You have an idea?"

"I hope so."

"And—?"

Dusty smiled wistfully. "From the time Scyth Radnor opened his space-lock and blasted off the end of my antenna, I've been running a losing battle," he said. "I've been playing a game far over my head; outpointed, overbid, overdrawn and sinking. About the only reason I'm still here fighting is that some of the rules of this cock-eyed game seem to fall into my own act. Yes, dammit, I've got an idea. Can I call the orders, Gant?"

"Take over, Dusty."

Dusty turned to the pilot. "When we get there," he said, "Circle the planet several times as fast and as low as you can. Create a stir. Radiate like mad, anything you can radiate. Call attention to us in a bold fashion and show 'em that what we've got is big, important and powerful." Then to Gant Nerley he put the question, "You wouldn't have anything as primitive as a radio set aboard, would you?"

"You mean a radiomagnetic communication device? Well, not for communications but we do have a small receiver for detecting the lower-radiation stars and one for scanning planetary systems for primitive cultures. What did you have in mind?"

Dusty looked Gant in the eye. "I want to broadcast orders to my Patrol."

"Oh. An excellent idea. We'll save time that way. The scanner-type ra-

diomagnetic wave equipment is two-way and connected to a menslator for contacting primitive peoples, you know, and—"

"Get it fired up," said Dusty shortly. "Full power."

THE screech of air came first as a thin whistle, and then thundered and slammed down at Earth below as the thirteen Marandian spacecraft were inched lower and lower into the complaining atmosphere. The howling racket dinned into the ears of Russian and Chinese and Hawaiian and Californian and New Yorker and Briton and Frenchman and Indian and Maylayan and Indonesian and Argentinian and South African and Australian and Mexican and Floridian. Around it went, across the land and the sea, a thunder blast of rent air that piled shock wave on shock wave and sent them tearing down at the ground below. The thunder cracked windows and made plaster sift down from ceilings. It dinned down a tree or two, and it hurled some people to the ground. It flipped a parked fleet of jetplanes over in crumpled ruin like a windstorm hitting a deck of cards.

Across the world, radar operators looked blankly at the signal pips that raced across their screens and began to make apologetic reports. Interceptors tried to rise, but were tossed madly in the racing shock-stream to lose ground and return to earth limping.

But in the lead spacecraft of this mad fleet, the barytrine operator watched his detector hopefully. The entire screen was aglow, but he watched it and finally said, "I think it's down there somewhere."

He pointed to a region in Indiana not far from the lower tip of Lake Michigan.

The fleet circled Terra once more, swung high for the long dive, and then came howling down on a long slant, while Dusty took the radio and cried: "Junior Spacemen of The Space Patrol, Attention!"

The radio, powered by machinus forces, hammered down and blanketed the

radio broadcast stations. It broke up the video screens in a mash of spots, flecks and snowflakes. Dusty's voice roared into telephone lines and onto the commercial radio links and chattered indistinctly in direction-finding equipment and made incomprehensible squiggles clutter the radar screens.

"Junior Spacemen, Attention to Official Orders! By now you are aware that your Commander, Dusty Britton, flies with a fleet of spacecraft above you. Now hear this!

"Within a few hundred miles of the lower tip of Lake Michigan there is concealed somewhere a dangerous device known as a barytrine generator. This must be located and stopped.

"Now! To the Junior Spaceman who locates this machine I will personally award the Medal of Merit. And to the entire Group Command of which he is a member I will award full scholarships as Space Midshipmen in a real Space Academy, to make them real spacemen.

"Now, Junior Spacemen, go out and find me that barytrine generator!"

Dusty signed off as the down-rushing fleet swaybacked close to the ground and pulled out to swap ends and go screaming up in a stark vertical climb, its drivers fighting the rise to a standstill fifty miles in the sky.

Here they hovered for a second to turn rightside up and then the flight formed into a pattern and began to land, coming down slowly.

Before they were halfway down, Dusty saw results. In the telescope were moving dots scouring the landscape. And along highways that led from town and city were boys on bicycles and a few in cars driven by parents. Across the fields they went, peering under trees and behind bushes, scouring the cornfields and the farms and stamping through woody sections like swarming ants.

But then as the flight landed in a neat pattern in a bald field, the barytrine detector hissed once and gave up, smoke curling out of the cabinet.

"Close," said the operator.

[Turn page]



## I Will Train You for Good Pay Jobs in RADIO-TELEVISION

**You Learn at Home by Practicing with Kits I Send**

Do you want a good pay job, a bright future, security? Want your own business? Then get into the fast growing RADIO-TELEVISION industry. Keep your job while learning. Hundreds I've

### I Trained These Men

"I received my License and worked on ships. Now with WEAN as control operator."—R. D. Arnold Rumford, R. I.

"4 months after enrolling, was able to service Radios. Averaged \$10 to \$15 a week spare time."—W. Weyde, Brooklyn, N. Y.

"Am doing Radio Servicing full time. Have my own shop. I owe my success to N.R.I."—Curtis Stath, Ft. Madison, Iowa.

principles from my illustrated lessons; get practical experience from kits sent.

### EARN WHILE YOU LEARN

Many of my students make \$5, \$10 extra a week in spare time fixing neighbors' Radios. Mail coupon for actual lesson and 64-pg. book, "How to Be a Success in Radio-Television." J. E. Smith, Pres., National Radio Inst., Dept. 8BQ, Washington 9, D. C.

The ABC's of  
SERVICING

### Good for Both—FREE

Mr. J. E. Smith, Pres., Dept. 8BQ  
National Radio Institute, Washington 9, D. C.  
Mail me Sample Lesson and Book FREE.  
(No salesman will call. Please write plainly.)

Name.....Age.....

Address.....

City.....Zone.....State.....

How to Be a  
Success  
in RADIO-  
TELEVISION

But Dusty, with a yell, was at the airlock. For across the field a thousand yards away was a faint bluish haze that shimmered iridescent in the sunlight. He pawed at the door as it swung open ponderously, then he looked around wildly for something to use. His eyes fell upon a small cabinet.

Scyth had placed that fluted-barrelled thing back in the airlock after he burned Dusty's antenna off. Dusty tore a cabinet open and grabbed one of the fluted-barrelled things from a clip.

Then he jumped to the ground and raced across the field.

"Dusty!" roared Gant Nerley. "That's dangerous. You can't—"

Gant let his voice trail away as Dusty plunged into the blue haze, fingering the trigger-button at the top of the pistol grip. The searing beam lashed out and slashed at the air as Dusty's heels caught the ground in a braking slide. Then the knifing beam slashed down across the metal case and into the ground before it. Curls of smoke arose and the ground sizzled. He cross-slashed and cut another ribbon out of the air and the barytrine generator, then cut down again.

There was a hiss and a sputter and the blue haze ceased—there was a blinding flash and a flat bark of something exploding violently. Dusty felt a wave of almost-intolerable heat, his closed eyes were seared by a flare of brightness, and the explosion hurled him backwards on his spine. He turned and scrambled back, stumbling over the rough ground, blinded.

At that moment four members of the Junior Space Patrol came through a small thicket of trees.

"Gee," said their Group Leader. "Gee—the Commander found it first!"

THEY stood on a small reviewing stand, Dusty Britton and the Group Command that had come through the thicket of trees in time to steer their blinded Commander away from the flaring barytrine generator. Dusty's face and hands were a super-sunburned red,

and his eyes were still puffy but open enough to see.

From a sheet of paper he read:

"It is not within my power to grant a medal that is worth the tin it is made of. But for the diligence and their quick action I do hereby grant and guarantee them full scholarships in White Sands University, which by the time they graduate will have become a full Space Academy. So I here hand them their Certificates of Entry, and to the President of White Sands University I deliver a certified check to be held in trust and used for their education.

"I salute the future Commanders of The Space Patrol and step down from my position to leave it open for them!"

There came a roar from the crowd that thundered across the field as Dusty stepped from the platform into a spaceport jeep and were hustled out to Gant Nerley's flagship. Inside there were a number of men waiting.

"Now see here, Dusty, you can't go galaxy-hopping when we've got plans for you."

Dusty eyed Martin Gramer with a grunt. "Last time we met in a place like this you had me all scheduled to take a space hop when I had other plans for myself. No dice, Gramer."

"But look at the money—"

"I'll make millions out of this clear-channel idea, according to Gant, here."

"That's right," said Gant.

"So," said Dusty, "if you think I'm going to go on playing the part of a broken-down hero-spaceman when there are real spacemen around, you're nuts, Gramer. Include me—as you've said so often—out."

"But what are you going to do?"

"Me? I'm going to Marandis. Barb and I have an offer from Supergalaxy Spectacles to make a series of what they call 'Primitives.' You know, old-timers with men using chemical rockets and learning their first feeble steps into space."

He grinned at Barbara knowingly. "I've got a script of *Destination Moon* I swiped from Central Files. It should oughta wow 'em cold!"





"Look," said Marmie, "what makes you always right? What makes me always wrong?"

"Marmie, face it. We're each judged in our own way. If magazine circulation were to drop, I'd be a flop. I'd be out on my ear. The president of Space Publishers would ask no questions, believe me. He would just look at the figures. But circulation doesn't go down; it's going up. That makes me a good editor. And as for you—when editors accept you, you're a talent. When they reject you, you're a bum. At the moment, you are a bum."

"There are other editors, you know. You're not the only one." Marmie held up his hands, fingers outspread. "Can you count? That's how many science-fiction magazines on the market would gladly take a Tallinn yarn, sight unseen."

"Gesundheit," said Hoskins.

"Look," Marmie's voice sweetened, "you wanted two changes, right? You wanted an introductory scene with the battle in space. Well, I gave that to you. It's right here." He waved the manuscript under Hoskin's nose and Hoskin moved away as though at a bad smell.

"But you also wanted the scene on the spaceship's hull cut into with a flashback into the interior," went on Marmie, "and that you can't get. If I make that change, I ruin an ending which, as it stands, has pathos and depth and feeling."

Editor Hoskins sat back in his chair and appealed to his secretary who throughout had been quietly typing. She was used to these scenes.

Hoskins said, "You hear that, Miss Kane? *He* talks of pathos, depth and feeling. What does a writer know about such things? Look, if you insert the flashback, you increase the suspense; you tighten the story; you make it more valid."

"How do I make it more valid?" cried Marmie in anguish. "You mean to say that having a bunch of fellows in a spaceship start talking politics and sociology when they're liable to be blown up makes it more *valid*? Oh, my God."

"There's nothing else you can do. If you wait till the climax is past and then discuss your politics and sociology, the reader will go to sleep on you."

"But I'm trying to tell you that you're wrong and I can prove it. What's the use of talking when I've arranged a scientific experiment—"

"What scientific experiment?" Hoskins appealed to his secretary again. "How do you like that, Miss Kane. He thinks he's one of his own characters."

"It so happens I know a scientist."

"Who?"

"Dr. Arndt Torgesson, Professor of Psychodynamics at Columbia."

"Never heard of him."

"I suppose that means a lot," said Marmie, with contempt. "*You* never heard of him. You never heard of Einstein until your writers started mentioning him in their stories."

"Very humorous. A yuk. What about this Torgesson?"

"He's worked out a system for determining scientifically the value of a piece of writing. It's a tremendous piece of work. It's— It's—"

"And it's secret?"

"Certainly it's secret. He's not a science-fiction professor. In science-fiction, when a man thinks up a theory, he announces it to the newspapers right away. In real life, that's not done. A scientist spends years on experimentation sometimes before going into print. Publishing is a serious thing."

"Then how do *you* know about it? Just a question."

"It so happens that Dr. Torgesson is a fan of mine. He happens to like my stories. He happens to think I'm the best fantasy writer in the business."

"And he shows you his work?"

"That's right. I was counting on you being stubborn about this yarn and I've asked him to run an experiment for us. He said he would do it, if we don't talk about it. He said it would be an interesting experiment. He said—"

"What's so secret about it?"

"Well—" Marmie hesitated. "Look, suppose I told you he had a monkey that

could type 'Hamlet' out of its head."

HOSKINS stared at Marmie in alarm. "What are you working up here, a practical joke?" He turned to Miss Kane. "When a writer writes science fiction for ten years he just isn't safe without a personal cage."

Miss Kane maintained a steady typing speed.

Marmie said, "You heard me; a common monkey, even funnier looking than the average editor. I made an appointment for this afternoon. Are you coming with me or not?"

"Of course not. You think I'd abandon a stack of manuscripts this high—" and he indicated his larynx with a cutting motion of the hand—"for your stupid jokes? You think I'll play straight man for you?"

"If this is in any way a joke, Hoskins, I'll stand you dinner in any restaurant you name. Miss Kane's the witness."

Hoskins sat back in his chair. "You'll buy me dinner? You, Marmaduke Tallinn, New York's most widely known tapeworm-on-credit, is going to pick up a check?"

Marmie winced, not at the reference to his deference in overlooking a dinner-check, but at the mention of his name in all its horrible trysyllabicity. He said, "I repeat. Dinner on me wherever you want and whatever you want. Steaks, mushrooms, breast of guinea hen, Martian alligator, anything."

Hoskins stood up and plucked his hat from the top of the filing cabinet.

"For a chance," he said, "to see you unfold some of the old-style, large-size dollar bills you've been keeping in the false heel of your left shoe since nineteen-two-eight, I'd walk to Boston." . . .

Dr. Torgesson was honored. He shook Hoskin's hand warmly and said, "I've been reading Space Yarns ever since I came to this country, Mr. Hoskins. It is an excellent magazine. I am particularly fond of Mr. Tallinn's stories."

"You hear?" asked Marmie.

"I hear. Marmie says you have a monkey with talent, Professor."

"Yes," Torgesson said, "but of course this must be confidential. I am not yet ready to publish, and premature publicity could be my professional ruin."

"This is strictly under the editorial hat, Professor."

"Good, good. Sit down, gentlemen, sit down." He paced the floor before them. "What have you told Mr. Hoskins about my work, Marmie?"

"Not a thing, Professor."

"So. Well, Mr. Hoskins, as the editor of a science-fiction magazine, I don't have to ask you if you know anything about cybernetics."

Hoskins allowed a glance of concentrated intellect to ooze out past his steel-rims. He said, "Ah, yes. Computing machines—M.I.T.—Norbert Weiner—" He mumbled some more.

"Yes. Yes." Torgesson paced faster. "Then you must know that chess-playing computers have been constructed on cybernetic principles. The rules of chess moves and the object of the game are built into its circuits. Given any position on the chess board, the machine can then compute all possible moves together with their consequence and choose that one which offers the highest probability of winning the game. It can even be made to take the temperament of its opponent into account."

"Ah, yes," said Hoskins, stroking his chin profoundly.

Torgesson said, "Now imagine a similar situation in which a computing machine can be given a fragment of a literary work to which the computer can then add words from its stock of the entire vocabulary such that the greatest literary values are served. Naturally, the machine would have to be taught the significance of the various keys of a typewriter. Of course, such a computer would have to be much, much more complex than any chess-player."

Hoskins stirred restlessly. "The monkey, Professor. Marmie mentioned a monkey."

"But that is what I am coming to," said Torgesson. "Naturally, no machine built is sufficiently complex. But

the human brain—ah. The human brain is itself a computing-machine. Of course, I couldn't use a human brain. The law, unfortunately, would not permit me. But even a monkey's brain, properly managed, can do more than any machine ever constructed by man. Wait! I'll go get little Rollo."

He left the room. Hoskins waited a moment, then looked cautiously at Marmie. He said, "Oh brother!"

Marmie said, "What's the matter?"

"What's the matter? The man's a phony. Tell me, Marmie, where did you hire this faker?"

Marmie was outraged. "Faker? This is a genuine professor's office in Fayerweather Hall, Columbia. You recognize Columbia, I hope. You saw the statue of Alma Mater on 116th Street. I pointed out Eisenhower's office."

"Sure, but—"

"And this is Dr. Torgesson's office. Look at the dust." He blew at a textbook and stirred up clouds of it. "The dust alone shows it's the real thing. And look at the title of the book: 'Psychodynamics of Human Behavior' by Professor Arndt Rolf Torgesson."

"Granted, Marmie, granted. There is a Torgesson and this is his office. How you knew the real guy was on vacation and how you managed to get the use of his office, I don't know. But are you trying to tell me that this comic with his monkeys and computers is the real thing? Hah!"

"With a suspicious nature like yours, I can only assume you had a very miserable, rejected type of childhood."

"Just the result of experience with writers, Marmie. I have my restaurant all picked out and this will cost you a pretty penny."

Marmie snorted, "This won't cost me even the ugliest penny you ever paid me. Quiet, he's coming back."

WITH the professor, and clinging to his neck, was a very melancholy capuchin monkey.

"This," said Torgesson, "is little Rollo. Say hello, Rollo."

The monkey tugged at his forelock.

The professor said, "He's tired, I'm afraid. Now I have a piece of his manuscript right here."

He put the monkey down and let it cling to his finger while he brought out two sheets of paper from his jacket pocket and handed them to Hoskins.

Hoskins read, "To be or not to be; that is the question: Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a host of troubles, and by opposing end them? To die: to sleep; No more: and, by a sleep to say we—"

He looked up, "Little Rollo typed this?"

"Not exactly. It's a copy of what he typed."

"Oh, a copy. Well, little Rollo doesn't know his Shakespeare. It's 'to take arms against a sea of troubles.'"

Torgesson nodded. "You are quite correct, Mr. Hoskins. Shakespeare *did* write 'sea.' But you see that's a mixed metaphor. You don't fight a sea with arms. You fight a host or army with arms. Rollo chose the monosyllable and typed 'host.' It's one of Shakespeare's rare mistakes."

Hoskins said, "Let's see him type."

"Surely." The professor trundled out a typewriter on a little table. A wire trailed from it. He explained, "It is necessary to use an electric typewriter as otherwise the physical effort would be too great. It is also necessary to wire little Rollo to this transformer."

He did so, using as leads two electrodes that protruded an eighth of an inch through the fur on the little creature's skull.

"Rollo," he said, "was subjected to a very delicate brain operation in which a nest of wires were connected to various regions of his brain. We can short his voluntary activities and, in effect, use his brain simply as a computer. I'm afraid the details would be—"

"Let's see him type," said Hoskins.

"What would you like?"

Hoskins thought rapidly. "Does he know Chesterton's 'Lepanto'?"

"He knows nothing by heart. His writing is purely computation. Now you simply recite a little of the piece so that he will be able to estimate the mood and compute the consequences of the first words."

Hoskins nodded, inflated his chest and thundered, "White founts falling in the courts of the sun, and the Soldan of Byzantium is smiling as they run. There is laughter like the fountains in that face of all men feared; it stirs the forest darkness, the darkness of his beard; it curls the blood-red crescent, the crescent of his lips; for the inmost sea of all the world is shaken by his ships—"

"That's enough," said Torgesson.

There was silence as they waited. The monkey regarded the typewriter solemnly.

Torgesson said, "The process takes time of course. Little Rollo has to take into account the romanticism of the poem, the slightly archaic flavor, the strong sing-song rhythm and so on."

And then a black little finger reached out and touched a key. It was a "t."

"He doesn't capitalize," said the scientist, "or punctuate, and his spacing isn't very reliable. That's why I usually retype his work when he's finished."

Little Rollo touched an "h," then an "e" and a "y." Then, after a longish pause, he tapped the space bar.

"They," said Hoskins.

The words typed themselves out: "they have dared the white republics up the capes of Italy they have dashed the adreatic round the lion of the sea; and the pope has thrown his arms abroad for agony and loss and called the kings of christendom for sords about the cross."

"My God!" said Hoskins.

"That's the way the piece goes then?" asked Torgesson.

"For the love of Pete!" said Hoskins.

"If it is, then Chesterton must have done a good, consistent job."

"Holy smokes!" said Hoskins.

"You see," said Marmie, massaging

Hoskins's shoulder, "you see, you see, you see. You see," he added.

"I'll be damned," said Hoskins.

"Now look," said Marmie, rubbing his hair till it rose in clusters like a cockatoo's crest, "let's get to business. Let's tackle my story."

"Well, but—"

"It will not be beyond little Rollo's capacity," Torgesson assured him. "I frequently read little Rollo parts of some of the better science fiction, including many of Marmie's tales. It's amazing how some of the yarns are improved."

"It's not that," said Hoskins. "Any monkey can write better s-f than some of the hacks we've got. But the Tallinn story is thirteen thousand words long. It'll take forever for the monk to type it."

"Not at all, Mr. Hoskins, not at all. I shall read the story to him and at the crucial point, we will let him continue."

Hoskins folded his arms. "Then shoot. I'm ready."

"I," said Marmie, "am more than ready." And he folded his arms.

**L**ITTLE ROLLO sat there, a furry little bundle of cataleptic misery, while Dr. Torgesson's soft voice rose and fell in cadence with a spaceship battle and the subsequent struggles of Earthmen captives to recapture their lost ship.

One of the characters made his way out to the spaceship hull, and Dr. Torgesson followed the flamboyant events in mild rapture. He read:

"—Stalny froze in the silence of the eternal stars. His aching knee tore at his consciousness as he waited for the monsters to hear the thud and—"

Marmie yanked desperately at Dr. Torgesson's sleeve. Torgesson looked up and disconnected little Rollo.

"That's it," said Marmie. "You see, Professor, it's just about here that Hoskins is getting his sticky little fingers into the works. I continue the scene outside the spaceship till Stalny wins out and the ship is back in Earth

hands. Then I go into explanations. Hoskins wants me to break that outside scene, get back inside, halt the action for two thousand words, then get back out again. Ever hear such crud?"

"Suppose we let the monk decide," said Hoskins.

Dr. Torgeson turned little Rollo on, and a black shrivelled finger reached hesitantly out to the typewriter. Hoskins and Marmie leaned forward simultaneously, their heads coming softly together just over little Rollo's brooding body. The typewriter punched out the letter *t*.

"T," encouraged Marmie, nodding.

"T," agreed Hoskins.

The typewriter made an *a*, then went on at a more rapid rate: "take action stalnee waited in helpless hor ror forair losts toyawn and suited laroos to emerge relentlessly—"

"Word for word," said Marmie in raptures.

"He certainly has your gooey style."

"The readers like it."

"They wouldn't if their average mental age wasn't—" Hoskins stopped.

"Go on," said Marmie, "say it. Say it. Say their IQ is that of a twelve-year-old child and I'll quote you in every fan-magazine in the country."

"Gentlemen," said Torgesson, "gentlemen. You'll disturb little Rollo."

They turned to the typewriter which was still tapping steadily: "—the stars whelled in ther mightie orb its as stalnees earthbound senses insis ted the rotating ship sto od still."

The typewriter carriage whipped back to begin a new line. Marmie held his breath. Here, if anywhere, would come—

And the little finger moved out and made: \*

Hoskins yelled, "Asterisk!"

Marmie muttered, "Asterisk."

Torgesson said, "Asterisk?"

A line of nine more asterisks followed.

"That's all, brother," said Hoskins. He explained quickly to the staring Torgesson, "With Marmie, it's a habit

to use a line of asterisks when he wants to indicate a radical shift of scene. And a radical shift of scene is exactly what I wanted."

The typewriter started a new paragraph: "within the ship—"

"Turn it off, Professor," said Marmie.

Hoskins rubbed his hands. "When do I get the revision, Marmie?"

Marmie said coolly, "What revision?"

"You said the monk's version."

"I sure did. It's what I brought you here to see. That little Rollo is a machine; a cold, brutal, logical machine."

"Well?"

"And the point is that a good writer is not a machine. He doesn't write with his mind, but with his heart. His heart." Marmie pounded his chest.

Hoskins groaned. "What are you doing to me, Marmie? If you give me that heart and soul of a writer routine, I'll just be forced to turn sick right here and right now. Let's keep all this on the usual I'll-write-anything-for-money basis."

Marmie said, "Just listen to me for a minute. Little Rollo corrected Shakespeare. You pointed that out yourself. Little Rollo wanted Shakespeare to say 'host of troubles' and he was right from his machine standpoint. A 'sea of troubles' under the circumstances is a mixed metaphor. But don't you suppose Shakespeare knew that, too? Shakespeare just happened to know when to *break* the rules, that's all. Little Rollo is a machine that can't break the rules, but a good writer can, and *must*. 'Sea of troubles' is more impressive; it has roll and power. The hell with the mixed metaphor.

"Now when you tell me to shift the scene, you're following mechanical rules on maintaining suspense, so of course little Rollo agrees with you. But I know that I must break the rules to maintain the profound emotional impact of the ending as I see it. Otherwise I have a mechanical product that a computer can turn out."



Hoskins said, "But—"

"Go on," said Marmie, "vote for the mechanical. Say that little Rollo is all the editor you'll ever be."

Hoskins said, with a quiver in his throat, "All right, Marmie, I'll take the story as is. No, don't give it to me; mail it. I've got to find a bar, if you don't mind."

He forced his hat down on his head and turned to leave. Torgesson called after him, "Don't tell anyone about little Rollo, please."

The parting answer floated back over a slamming door, "Do you think I'm crazy?" . . .

Marmie rubbed his hands ecstatically

when he was sure Hoskins was gone.

"Brains, that's what it was," he said, and probed one finger as deeply into his temple as it would go. "This sale I enjoyed. This sale, Professor, is worth all the rest I've ever made. All the rest of them together." He collapsed joyfully on the nearest chair.

Torgesson lifted little Rollo to his shoulder. He said, mildly, "But, Marmaduke, what would you have done if little Rollo had typed your version instead?"

A look of grievance passed momentarily over Marmie's face, "Well, damn it," he said, "that's what I *thought* it was going to do."

## GUIDE TO THE BEST CURRENT SCIENCE FICTION



### THE VIRGIN OF ZESH

*A Rollicking Novel*

By L. SPRAGUE  
de CAMP

*in February*

### THRILLING WONDER STORIES



Bradbury  
Heinlein  
Kuttner  
Asimov  
Williamson

*All in the 1953*

### WONDER STORY ANNUAL



### THE BIG JUMP

*An Interstellar Novel*

By LEIGH  
BRACKETT

*in February*

### SPACE STORIES



Hamilton  
Leinster  
De Camp  
Matheson  
Coppel

*in the January*

### FANTASTIC STORY MAGAZINE

# POTEMKIN

## I

**D**IRECTOR Unterbaum of the Intercolonial Office rose from his chair as the pair came in. "I take it you haven't met before?" he said. "Mr. and Mrs. Lanzerotti, this is Ann Starnes, the recording photographer, and Robert Heidekopfer, one of our better writers."

There were smiles and acknowledgments. Unterbaum touched a pair of buttons on his desk and two chairs slid out of the walls to make a group of five. "Sit down, please," he said. "Now I'm not going to mince words. The reason you're here is because the Council wants you—three of you, at least—to undertake a mission. Vincent—" he indicated Lanzerotti, who nodded a dark head—"already knows something about it, but for the benefit of Miss Starnes and Mr. Heidekopfer, I will say that we want to send you to Tolstoia."

Heidekopfer smiled and said, "Sounds better than that trip to the polar mines on Mars, eh Ann?"

"Warner, anyhow," said the girl, turning a carefully-kept blonde head. "But I thought Tolstoia was closed to visitors."

"The patriarch has agreed to let a delegation in for this visit," said Unterbaum, "so we can render a fair and unbiased report on Tolstoia, in word, picture and observation. The point is this; there are some islands about three hundred miles off the coast of Tolstoia, between it and South Bergenland—the Wrightley Islands. They have no resources, but Tolstoia wants to colonize them." He touched buttons again, and a map appeared on the wall showing the almost-round shape of the island nation, with the islands and the tip of South



He turned to look at her; her lips were slightly

# VILLAGE

A Novelet by FLETCHER PRATT

*The expedition to that strange colony on Venus seemed to be a success . . . but why did the castaways that landed there always come back . . . in glass caskets?*



parted as she lifted her lovely face toward his

Bergenland at the right.

Unterbaum went on: "They're uninhabited, so there isn't any objection from the Demographic Commission, although it's unusual for one of the hermit-states to expand. But there are certain features of the request that make the Council inclined to go slow; or at least to want more information."

He stopped, seeming to wait for a question, so Heidekopfer asked it. "What are they?"

LANZEROTTI answered, "To begin with, the place was founded in accordance with the philosophy of Count Leo Tolstoi, a Russian writer of some centuries back. The Russians discovered that a sect of people who believed in his ideas was growing up in their country, and considered it a threat to the organization of their state. They couldn't dispose of the Tolstoians under the genocide laws, so they appealed to the Council and it agreed to expatriate all the Tolstoians the Russians could identify."

"Then it was a penal colony, like the Moon mines?" inquired Heidekopfer.

"No," said Lanzerotti. "As a matter of fact, when the announcement was made, the Tolstoians came forward in numbers and identified themselves. But they thought they were going to have a reservation set apart for them in Russia itself, and when they found they were going to an island on Venus, there was a certain amount of resentment."

"Do you think it still exists? That if they're allowed to get hold of the islands, they'll do something drastic—say start a war?"

"Not after all these years," said Lanzerotti. "It's nearly three centuries, and national resentments don't last that long without something to feed on. Besides, pacifism was one of Tolstoi's doctrines."

"Then what are we supposed to look for?"

Lanzerotti spread his hands. "We don't know. That's what's worrying the Diplomatic Division. Asking for more territory indicates a rising birth-rate, but the kind of territory they're asking for

doesn't promise a rise serious enough to worry the Demographic Commission. We don't consider it likely that Tolstoianism has become militant. But to be honest, we just don't know."

Ann Starnes smiled. "It sounds like hunting for a needle in a haystack when you don't even know whether there's any needle," she said.

"On the contrary," said Unterbaum, "we're fairly certain there is a needle, and a sharp one. What we need to know is what kind of needle it is before someone gets stuck with it. Listen—" He snapped up one of the lids in his desk and spun a wheel of recording tape. "Planes aren't allowed to land in Tolstoia, of course, but every once in a while one comes down there, and occasionally a yacht or fishing craft gets wrecked on the coast. Now the normal procedure in such a case with a hermit-state is that they hold survivors and notify someone to come and get them. They stopped doing that about eighty years ago."

"What do you mean?" said Heidekopfer. "Stopped notifying or stopped rescuing survivors?"

"It isn't quite certain," said Unterbaum, "but here's the sequence, such as it is. Seventy-eight years ago Bernard Jones and his wife disappeared while on a flight from MacNider to South Bergenland." He indicated the map. "You see, that would carry them close to Tolstoia. Three months later one of the fishing vessels, which are the only form of communication the Tolstoians have, turned up at MacNider. It had a letter from Mrs. Jones. She said her husband had died in a crash landing, and she was staying in Tolstoia with the permission of the authorities."

"Anything wrong about that?" asked Heidekopfer.

"There's nothing wrong with any of this," said Unterbaum, "at least as far as that instance goes. It's other things. Nothing has been heard of Mrs. Jones since. Seventy-six years ago, a musician named Bruno Zaleski went on a yachting trip in the South Ocean with a party of three. They never came back. After the

usual interval letters came through from all of them. They said they found Tolstoia a Venusian paradise and were going to stay. Zaleski was heard from again. At the time of the next incident, one year later, his brother received a letter telling how happy he was."

HE PAUSED for a moment. "The incident sixty-seven years ago was the beginning of a new series. It concerned a man named Walter Artem, another plane case. Like Jones, he disap-

"That's what I thought," said Unterbaum. "But there's an explanation. The records show that the Tolstoians, even while they were in Russia, showed a peculiar reverence for their dead when they were important people. It's a hold-over from their twentieth century leader Lenin. They preserve bodies this way so they're visible. The explanation that came with Artem's body was that the Tolstoians didn't know how important he was, but thought he might be big enough to deserve preservative treatment."

## *The Weapon of Ridicule*

IT WAS Voltaire, an old time science fiction writer, who was forever pointing out that ridicule is one of the most devastating weapons known to mankind. And it is noteworthy that Voltaire so often used science fiction as his vehicle for ridicule, for he had made the early discovery that this was the best of all possible mediums. With no restrictions on theme or imagination the mind is given full play in dealing with the schizophrenic nonsensities of our civilization. It takes a sophisticated and civilized mind to do it well and it is a job at which our Fletcher Pratt does very well.

Here is a look at the end results of totalitarianism, thought control and all the rest of it. Makes quite a picture — one Voltaire would have loved.

—The Editor

peared. One of the Tolstoian fishing-craft brought him back, but he was dead. They had preserved his body carefully. I'll show you the picture."

He touched the stud and the watchers found themselves gazing at a coffin, partly glassed so the occupant was visible to the waist. Rose Lanzerotti gave a little cry and with reason, for the face within was peculiarly horrible; bloated and suffused with blood, the neck swelling out over a clearly visible rope.

"They explained he had hanged himself," Unterbaum continued.

"I have a question," said Ann Starnes. "Why did they go to all the trouble of preserving him just the way he died? It sounds as though they were afraid somebody might get suspicious."

"Polite of them," murmured Lanzerotti.

"Very," said Unterbaum. "Almost too polite. Because it was repeated—since Artem there have been six cases of castaways on Tolstoia committing suicide and being delivered at MacNider in preserved form."

"All hangings?" asked Heidekopfer.

"No. One stabbing, three shootings, two overdoses of soporifics. There are autopsy records on those, and they're legitimate."

"Seems a high proportion of suicides among the castaways," said Heidekopfer. "Can anything be made of that?"

"Nobody seemed to think so," said Unterbaum. "Seven suicides out of a given group over a period of eighty years

isn't much, after all. The thing that stirred up our office was the discovery that in the past eighty years not one castaway has come back alive. They've either been crated out as suicides or sent through letters saying they have decided to become citizens of Tolstoa."

He paused a moment to let that sink in. "A number of these cases are rather special. There was Carmenilla Baio, forty-four years ago. She was a video dancer on a flight from MacNider to South Bergenland. Sent out the usual letter saying she had decided her future lay in Tolstoa, and followed it with another one a couple of years later. That's ordinary enough, but the case made the news, and when we went through the records, we found that when she disappeared she had been married only three months and was passionately devoted to her husband. Her second letter was written in a kind of code, and asked him to fake an accident and join her there."

"Did he?" asked Ann Starnes.

"Any possibility of forgery in those letters?" asked Heidekopfer at the same time.

Unterbaum turned to the girl. "No to your question. As for the other one, Carmenilla Baio's private code was certainly no forgery."

Heidekopfer said, "It appears that the Tolstoians compel them to stay there, and if they argue, bump them off. Is that it?"

"That would be a charge of genocide. I do not think—" began Lanzerotti.

"I don't either," said Unterbaum. "The Tolstoians wouldn't expose themselves to such a thing, especially in view of their origins. No, I'm convinced they have been quite honest, leaning over backward—as witness the preserved suicides—but there's some factor in the equation we don't know. And I won't deny that there's danger in the trip."

"Then I'm going," said Rosa Lanzerotti, decisively. She was a small woman with vivid Italiote coloring.

Ann Starnes said, "Might as well square the party off, hadn't we? It would be nice to have someone to handle the recording tapes and films."

Unterbaum frowned. "The Intercolonial Office—" he began.

Lanzerotti said, "I believe that psychologists recognize it as a temperamental danger to send two men and one woman on a protracted expedition."

"I ought to know better than to argue with a diplomat," said Unterbaum.

## II

THE low spit guarding the harbor entrance was only a slightly deeper blue than the water and perpetual overcast of Venus. Captain Ratterman sighed, reported "No charts," and spoke into the communicator, "Cut speed to eight knots, use full automatics on the bottom sonics," then he turned to the pair beside him on the bridge. "I'm not being inhospitable. In fact, you're welcome to stay as long as you please. But it's fair to warn you that we won't be docking for another three hours."

"We love your company," said Ann Starnes, but Heidekopfer picked at her arm, and led her toward the gangway. When they had reached the low, flat bow with the water whispering softly beneath, he said, "How about it, Ann? Why not marry me now and save trouble? You're going to anyway, some day, and it might be a protection here."

She put a hand over one of his. "No, Bob. Not now. I'll give you first place on the list, but I'm not going to marry you—or anybody else—until I'm something more than a failure."

"You're no failure. The fact that you were selected for this job proves it."

"Just a competent mechanical photographer, Bob—you needn't tell me. I was picked because I had worked with you before, and your work is important."

"Look. . . ." he started to say, then let it trail off. They had argued the point so often it was like another trip on a merry-go-round. Ann said, "I don't want to be just a wife, like Rosa Lanzerotti."

He moved. "Do you think she's—a failure?"

"No-o. Not within her own dimen-



sion. It just isn't mine. I want to be something more important than a good mechanical photographer."

"Did it ever occur to you—" he began, and let it trail off as he watched a formation of the odd Venusian batfish soar from the water under the bow and sweep overhead to dive again in perfect alignment. The ship swung. The long blue tongue of land came round on their right and the harbor opened before them. There was a little grove of masts at its depth clustered around what seemed to be docks, but he saw no town on the shore behind.

"Think you can handle the language all right now?" asked Ann, a note of banter in her question.

"If there hasn't been too much development in it since Tolstoia was closed off. Communications thought a good many special terms might have developed. What worries me more is the system of ideas. You were lucky, not having to study Tolstoi. He had a philosophy, all right, but I can't conceive how it could be translated into a practical method of living, and neither can Vincent. Unless we do understand, it's going to be hard to present a sympathetic picture."

"Photos are always sympathetic," said Ann. "The question is, do we want to be? Let's go down and have a cup of coffee. The betting is there won't be any where we're going."

The other two were in the cabin and the cup of coffee lasted until a cessation of movement and a slight bump indicated they had arrived. There was a bustle of gathering luggage; they went topside to find the gangplank already laid to a dilapidated dock with holes in the planking, alongside which little Tolstoian fishing craft rose and fell rhythmically to the swell. At the shore end of the dock a little group of men in embroidered white smocks with square caps on their heads looked on with an air of complete uninterest as the ambassadors disembarked. There were four droshkies behind them; a house was visible among drooping-branched Venusian trees.

ANN set her camera to automatic and hooked it to her belt as Lanzerotti led the way along the dock. Three of the men detached themselves from the group and waited. As the ambassadors approached, one of them clasped his hands together, said, "Behrmann, Andrei Pavlich" and took a step back. "Vikhranov, Nicolai Leonovich," said the second, and the third, "Kazetzky Pyotr Ilyich." He was a tall man, with a long, hooked nose and an expression of deep melancholy.

Lanzerotti stepped forward. "We are the representatives of the Interplanetary Council," he said. "My name is Vincent Lanzerotti with the rank of ambassador. This is Mrs. Lanzerotti, and Miss Starnes, our photographer and Mr. Heidekopfer, the official observer. We have a good deal of baggage."

The three looked at each other. Behrmann was a short man with a broad Slavic face. He said, "Bring it forward. Transportation has been provided to the seat of the patriarch."

Heidekopfer remembered that somewhere in Tolstoi there was something about not waiting on other people; also, that he was not going to have as much difficulty with the language as he had feared. Behrmann's accent was a little funny, but he put his sentences together in the classical manner and with the right words. The sailors were loading their baggage onto power-dollies. Vikhranov said, "The ambassador will take the first droshky, with myself, and Pyotr Ilyich. Andrei Pavlich will accompany you in the second." He waved a hand toward Ann and Heidekopfer.

As their guides led the way toward the vehicles, Heidekopfer said, "One thing surprises me, if you don't mind a snap judgment. I would have expected to find more of a city around your port."

Behrmann turned his head with a smile. "We have no cities," he said. "They are destroyers of nature, and without communion with nature there is no happiness."

That was good Tolstoi, all right, thought Heidekopfer, and said to Ann,

"They don't take very good care of their roads here, do they?"

"I should say not—and my mud-shedders are all nicely packed in the baggage, too." She lifted a neatly clad foot that was already plentifully marked with black Venusian mire. "Their trees are nice, though, and look how even the rows in that field are." She aimed the camera at it for a moment, and spoke to Behrmann in Russian; "Where are the fishermen for the boats?"

"Oh, this is Thursday," he said, standing aside so she could get in the droshky. "On this day they work in the fields. It is good to work in the fields, and we have a law that all who follow other forms of work shall do so for one day a week."

"That's not a bad law for an agricultural community," observed Heidekopfer. "I suppose you are practically all agriculture? But what do you do for manufactured articles—like shoes and glass and newspapers?"

In the droshka ahead Vikhranov raised his hand; both drivers shouted something like "Ya-ya!" simultaneously, cracked their whips tremendously, and the procession was off along a dirt road in a decidedly poor state of repair.

"I am not sure I understand your question," said Behrmann. "Shoes or glass, when we want them we make them. As for newspapers, they are forbidden by the word of the Master. I know there must be such things, because they are mentioned, but I have never seen one and do not really know what they are."

THE road had begun to rise toward a cut in a range of low hills. "Uh-huh," said Heidekopfer, "and I suppose radio falls under the prohibition on newspapers. Well, let me put it this way; suppose someone had an idea for a new kind of machine. Would he have to make all the parts himself?"

"There is a law against machines. They interfere with simplicity."

"But doesn't anyone ever have an idea for a machine so brilliant that he simply has to make it in spite of the law?"

"How could he? It is against the law."

"Do you mean that the law here is always obeyed?"

"Always. That is the superiority of Tolstoia to all other peoples. Those who come to our happy country by accident never wish to leave when they find that through the doctrines of the Master we have established the brotherhood of men."

Ann gave a little giggle. "I know," said Heidekopfer rapidly in English, "I think we can take that with a cellar full of salt." He switched to Russian; "Then you have no crime?"

"In our happy country?" said Behrmann. "No. Look how beautiful is the arrangement of the cows in that field?"

Heidekopfer sighed. Then he said, "Tell me something about the government of your country. I don't want to be too inquisitive, but I have to report on these things when I get back."

Behrmann's face flashed a frown. "It is hard to explain this to an outsider, but we know of what you call government only from the works of the Master, who spoke of it as it was in the old days, in the old Russia, the holy Russia." He lifted a hand to his face, and Heidekopfer was dumbfounded to see the man was wiping away a tear. "There is the patriarch, but he is only the general secretary of the Supreme Soviet."

"Well, who makes the laws?"

"The Supreme Soviet."

"How are they elected—or chosen?"

"We all agree on them."

Heidekopfer was saved from going mad by a cry from Ann Starnes. They had passed through the cut into the hills and now, as they swung round the brow of one, a wide valley lay spread before them under the soft Venusian light. It was dotted with little clumps of trees and had houses here and there, mostly low and with curiously bound-down thatched roofs. With the green fields and grazing animals, it made a scene of truly pastoral beauty. Ann said, "Tell him to stop for a minute, will you? I want to get this."

Behrmann looked at Heidekopfer. "Is it your will also that we stop?"

"Sure, why not," said he. "Isn't even necessary to ask if the girl-friend wants it. Do you have a law about women getting permission for what they want to do, too?"

"No. Stop, Pavel Josephovitch." He turned to Heidekopfer; "But the will of one must become the will of all."

"Now I don't understand," said Heidekopfer, as Ann adjusted her camera to take a sweeping panorama of the valley. "Would you mind explaining?"

"In happy Tolstoia when the desire of one person would cause others to do what they might not desire, all must agree before it is done. To allow anything else would be compulsion, and as the Master says; 'Anything that savors of compulsion is harmful.'"

"I can see where there must be some prize family arguments in happy Tolstoia," said Ann, in English. "Would I like to be married to a man if I had to get his agreement every time I wanted to buy a new hat? No."

"If you'll marry me you won't have to—" began Heidekopfer, but Behrmann was speaking again:

"It was not always so. When our people came from holy Russia, they were like others on earth, with only the desire for universal brotherhood and the writings of the Master to guide them. But there was so much love among them and they obeyed the law so well that a hundred thirty-one of our years ago, brotherhood was attained and the will of all became the will of the one. Now it is possible for us to extend the privilege of agreement to outsiders. This is why none who have felt it wish to leave."

**B**Y THIS time, they had almost caught up to the leading droshky, which was just turning into a tree-lined alley at the end of which stood quite the largest house they had yet seen. It had two stories and a couple of jutting wings beside the central door. "This where we're going?" asked Ann.

"The residence of the Patriarch Pitrim Androvich Samsonov," said Behrmann, with the sonorous accents of one who is

aware of saying something impressive.

The others got out and waited for them. When they had assembled Vikhranov led the procession, opening the door himself, and they found themselves in a neat hall with whitewashed walls and plain chairs standing against them. The light from the door was helped out by a couple of candles in bracket holders on the wall. Vikhranov said, "You will wait here," and turned through a door to the right. It could not have been more than a couple of minutes before a tall, strong man came out, wiping his hands on his smock, as though he had just been interrupted in something. Heidekopfer experienced an almost physical shock at the emanation of personality that seemed to flow from him. He might equally have been a general or a prophet, but either way there was no doubting that if he wanted somebody to do something, they would probably do it. Ann too was affected. She lifted her camera and let the photographing light play on the patriarch, but he moved his head slightly, the light went out and she put the camera back to her belt, an expression of awe suffusing her face.

Vikhranov said, "Little Father, these are the ambassadors from the Council. They did not tell me their names."

Lanzerotti gave him a peculiar look and said, "I am the ambassador and my name is Lanzerotti. This is—"

The big man lifted a hand. "It is good for simplicity to address all persons by their patronymics," he said. "Mine is Pitrim Androvich." Instead of looking at Lanzerotti he was staring fixedly at Ann.

"Oh, I see," said the diplomat. "Well by that system, I suppose you'd have to call me Vincent Guidovich. And this is my wife, Rosa—uh—Mariovna."

Heidekopfer and Ann similarly identified themselves. Samsonov said, "We will show you your rooms. Is it your custom to change the clothes after traveling?"

Rosa Lanzerotti spoke for the group, "I think I'd like to change my shoes at least. They got rather muddy."

Samsonov turned to Kazetzký: "Pyotr Ilyich, will you and the horse-drivers bring the baggage of the ambassadors to the rooms in the west wing, in the name of the Master? There is a special law that this service may be performed for them."

He reached out a hand, calmly took one of Ann's, and began to lead her along the hall toward a door on the opposite side. There didn't seem to be anything to do but follow.

"Do you have any children?" said Samsonov, as he turned down a corridor at right angles to the first. "It is Nature's way of life for women to have children."

Ann laughed. "I'm afraid not yet. I'm going to leave that until after I'm married."

"It is not against our law for women to have children before." Still holding the girl's hand, he touched a door. "This room will belong to you, Vincent Gudivich."

The next was for Heidekopfer. The opened door showed a clean, plain room with Venusian yellow poppies in a vase on a writing table, a bed and a washstand with a pitcher of water. The walls were bare and there didn't seem to be any plumbing. Outside the baggage was arriving. Heidekopfer claimed his own, unpacked and put on a pair of clean shoes, and went out to find Ann's door open and the girl engaged in a similar task.

He grumbled, "If that big bruiser keeps on making such a play for you, it's going to be bad for international relations."

She laughed. "He said he loved me—but in the brotherhood of man, everyone most love everyone else. Then he let me take his picture. Let's go check with the Lanzerottis before going to the audience." She stood up.

### III

**L**ANZEROTTI was zipping open a bottle-container. "Well, Robert Murayovitch, first impressions."

"About what I would have expected from a regime founded on the ideas of Tolstoi," said Heidekopfer, "and a rather screwy setup. But my general impression was not unfavorable. They seem to be running the place with a decent respect for human values and each other."

"The will of all is the will of one," quoted Lanzerotti. "Did they say that to you, too?" He took a couple of bottles of champagne from the container. "I'm going to give our hosts a treat. It never hurts in opening diplomatic negotiations. I suppose it's too early to ask yet, but you didn't run onto anything that might be a clue to why we aren't getting the castaways back?"

"Nothing that you'd call a clue, but something that might have a connection. Our guide told us that Tolstoia had attained the brotherhood of man a hundred thirty-one Venus years ago. That's eighty-one earth years, and strikes awful close to the date when Unterbaum said the disappearances began."

"Even so," said Ann, "I can't see a whole group of people who have been brought up in civilization giving it up for this." She swept her hand around the room, which was as bare as the others. "Especially that dancer he mentioned."

"A point," conceded Lanzerotti. "Shall we go?"

He led the way back to the main hall. The door from which Samsonov had emerged stood open, and there was a wide table in the room beyond, laid with an array of dishes which held any number of hors d'oeuvres, while eight or nine men and women were gathered about Samsonov. "You know your Russian customs, all right," Heidekopfer murmured to Lanzerotti as the patriarch came forward.

He explained that these were the central committee of the Supreme Soviet; there were introductions and Lanzerotti presented his champagne, which Heidekopfer had to open because none of the Tolstoians seemed to know how.

Vikhranov said admiringly, "How beautiful is the play of bubbles in this

beverage!" as the ambassador lifted his glass, saying, "To the future of Tolstoia!" bowed to Samsonov and drank.

The patriarch's return bow was a trifle stiff, but he sipped—and immediately appeared to become the victim of a revolution, spitting the champagne on the floor and coughing with bulging eyes, while the others gathered round him with expressions of sympathy. After a moment of gasping recovery, he pushed them aside and said to Lanzerotti, "I taste alcohol! Is it not so?"

"To be sure," said the ambassador. "You can't very well make champagne without it. Please accept my sincerest apologies for offering it to you if it offends you, however."

"We have a law against it in Tolstoia! The drinking of alcohol leads to failure to recognize the brotherhood of man!"

Heidekopfer said to Ann, "They had a law against alcohol in America once, too, but as far as I can remember, it didn't keep people from drinking."

"Hush," she said, "I like to watch the way he holds his head."

HER eyes were fixed on Samsonov, who was returning the glance with interest as he talked to the ambassador. Heidekopfer growled, helped himself to some of the *zakuski* (which seemed to consist largely of various kinds of pickled fish and vegetables, with some of the soft Venusian *kara* nuts) and moved over to join the group around Rosa Lanzerotti. Kazetzky was just saying, "It would pleasure me greatly, little mother, if it is your will to allow me to show you some of the natural beauty of happy Tolstoia tomorrow, while the others are making their official observations."

"Thank you," she said, "but I usually go with my husband on inspection trips, when there are any, and I think I'd rather like to—" She broke off suddenly with a frown between her brows, and Heidekopfer noticed that the others in the group were staring at her with a quite peculiar intensity. Kazetzky was swinging in his fingers some kind of little bright ornament that he wore on a chain

around his neck.

Rosa Lanzerotti said slowly, "I think it would be very nice. You'll have to call for me, though. I have no idea of what hours you keep in Tolstoia."

Kazetzky's lugubrious countenance took on an expression that was almost a smile. "It shall be as you desire, little mother. The will of one is the will of all."

The group seemed to split apart, and Vikhranov's voice said in Heidekopfer's ear, "Will you try some of our Tolstoian beer, Robert Murrayovich?"

"I thought you had a law against alcohol," said Heidekopfer, accepting the proffered mug.

"But beer is not alcohol. No one could become drunken from it. Besides, we have a law against becoming drunken, too."

The hell you say, thought Heidekopfer privately, and quaffed. It was about as he suspected; the beer was certainly not 3.2. He said, "What's the official schedule for us tomorrow?"

"In the morning we visit a school and see how children are educated in happy Tolstoia. If there is time we will also visit the grave of the Patriarch Ilarion Triunfovich. In the afternoon, you will see one of our collective farms. On the following day a picnic has been arranged. It will last all day in accordance with our custom."

Heidekopfer frowned. "The school may be some help, and I don't doubt that the farm will be. But in the nature of the report we have to make, a visit to one of your law courts would be a lot more interesting than a picnic, and a sitting of your Supreme Soviet more interesting still."

Vikhranov's flat face showed disapproval. "The sittings of the Supreme Soviet are in secret by law," he said. "We would have to pass a special law admitting you, and I am not sure but it would be concisionary."

"Excuse me. You seem to have developed a term there I have not heard before. What does 'concisionary' mean?"

The guide's disapproval surprisingly became sullenness. "Am I to blame if

you cannot understand good Russian?"

"We went to some trouble to learn it, even getting records of Russian as it was spoken at the time Tolstoia was founded, and I'm sorry if I've given offense. But my friend, I'd have you remember that we're here to do you a favor, not the other way round. Have you got a dictionary?"

"We have no need of dictionaries in happy Tolstoia. They are a part of culture and culture is fatal to happiness. It is set down in the Master's own words."

IT WAS saved from developing into a hassle as someone touched Heidekopfer's arm to present him to Anna Gol'yevna Samsonova, a small woman with dark hair, high cheek-bones and a mouth that seemed set in a perpetual mysterious smile. She said, "Have you been in holy Rrrrrussia, on earth, Robert Murray-ovich?"

"No, I haven't had that pleasure," he said, and added gallantly, "But I'm sure this is better. You have made life so much simpler."

"Yes, that is true. Here in happy Tolstoia the will of all is the will of one, and the will of all is toward the good of all. All are happy."

Her eyes darted past him, and he half-turned in time to see that Samsonov was certainly displaying indisputable signs of happiness as he talked to Ann, and what was a good deal worse, the girl was showing no signs of unhappiness. Rather hastily, he said, "Don't you ever have disagreements?"

"Oh, yes. But they do not last long. And if one is not attuned, then he takes the cure."

"I see," said Heidekopfer, although he was reasonably sure he did not, and was saved from more of this disjointed conversation by the ringing of a bell, which Mrs. Samsonov said announced dinner. She led the way through the side door to another large room, where there was a table laid for dinner with steaming dishes already in place. Heidekopfer noticed that the plates were of wood, and of the flatware beside them only the

knife-blades were metal. Everyone seemed to seat him or herself where they pleased and fell to work at once on the food without ceremony.

Mrs. Samsonov said, "You may find our food difficult. People who come here often do at first. But we have a law against eating meat except while taking the cure."

Difficult was the word for it, reflected Heidekopfer, munching away at something that appeared to be a combination of cabbage and boiled nuts with a sour sauce. He said, "You seem to have laws about almost everything. Clothes, too?"

She surveyed him with an air of puzzlement, and he noticed that in the candlelight her eyes had a singularly deep quality. "Of course. How would we know how to act without laws?"

"Tell me, what does 'concisionary' mean?"

"It means—" she gave him that glance again—"I don't quite know how to define it, but something against the will of all. As you stay in happy Tolstoia, you will understand." For a moment, looking into her eyes, it seemed to Heidekopfer that he almost did understand. Then she said, "Alexei Ivanovich is concisionary."

"Who?"

"Alexei Ivanovich Dubrassov. The traditionalist. He wished to become patriarch when Pitrim Androvich did, but he would have led Tolstoia back to the days before the brotherhood of man was achieved." She looked around the table and clapped her hands as a signal that the meal was over, and a couple of girls came hurrying in to gather the plates.

Heidekopfer said, "Pardon me, but didn't someone tell me that you had a law against serving one another?"

"It is the will of all that the patriarch be served," she said. Nobody seemed to be leaving the table and the reason became apparent when two men with goose-necked stringed instruments came in, accompanied by a girl who began to sing as they played. The music had certain haunting strains, but was so disjointed that Heidekopfer decided he didn't like



it, and looked down the table to see how the others were taking it. He got a shock. Samsonov, seated between Rosa Lanzerotti and Ann, had his arm around the latter's shoulders, and she was leaning back with her eyes half-closed and the smile of a smug kitten.

## IV

ANN'S voice sounded vaguely apologetic as she explained to Heidekopfer. "His wife didn't seem to mind," she said. "I was watching her."

"That isn't the point," said Heidekopfer. "It isn't even the point that I minded a hell of a lot. As you have so often informed me, I don't own you or even have a claim on you, much as I'd like to. I just want to know *why* you did it."

The girl's lips closed and her pretty face set in obstinate lines. "Because I wanted to. Because I felt like it. For the same reason I've kissed you a few times."

"But you've never kissed me with about sixteen people looking on. And may I point out that the reason the cast-aways stayed in Tolstoia was because they wanted to, too. I want to know what made you want to do it."

"And you're going to put the whip on me to find out," said the girl, but with a smile. "No use, Bob—call it an uncontrollable impulse."

Someone tapped at the door and it was Lanzerotti. "Want to come into my room?" he said. "I'd like to compare notes, and if we do it here, two of us will have to sit on the bed."

"All right," said Heidekopfer. "Rosa back yet?"

"No, still communing with nature and Pyotr Ilyich Kazetsky." He glanced at his watch, saying, "I forgot that's no good here on the different system of time, but I'd guess that it's a good hour before bedtime, so I'm not going to worry. Come on." He led the way down the hall, and threw open the door.

"Notice there isn't a lock in the place?" said Heidekopfer. "It may really

be true that they've abolished crime."

"I didn't see any either," said Lanzerotti, "but we have to be careful about drawing conclusions from guided tours. The Russians have always been great on setting up Potemkin villages."

"Oh, back in the old imperial days an Empress named Catherine went on a progress through the country to see how it was getting along under her prime minister, Potemkin. He went ahead of her and had villages set up, just the dummy fronts of houses, with actors to play the part of villagers. Back in the Soviet period they used to pull the same trick, to show tourists how prosperous the country was, only they did it with real model villages and factories and people working in them."

"I don't think they're doing that with us," said Heidekopfer. "On the way to the school, I asked to turn off and see one of the farms we passed, and it all seemed perfectly normal and in key with the rest."

"Shall I get the pictures?" said Ann. "That white wall is rather rough, but I imagine it will take projection."

"No, they're for the record," said Lanzerotti. "I just want a verbal report and impressions." He stepped across the room and opened the sound box for recording.

"Well," said Heidekopfer, "we went to a school this morning. It was quite small, but had children of all ages up to about sixteen. It was more like a manual training institute than what we'd call a school. Most of them were learning to use tools, and some of them working in a garden, and doing a pretty good job of it, I'd say. There was only one class with books."

"I asked about that," said Ann. "They practically don't have any books, and those they do have are hand set and hand printed."

"Of course, I can understand their not using microfilm," said Heidekopfer. "That would run into their prohibition of machines. But I don't quite see how they can claim a printing press isn't a machine."

LANZEROTTI smiled. "Logic isn't the long suit of most theorists," he said. "However, my opinion is generally favorable. They seem to be decent people with a high standard of morality, and in spite of the Potemkin village angle, it looks good. There's just one thing—we still haven't found any explanation of why the castaways didn't come back. And that is primarily why we came here."

Heidekopfer said, "We can add a second point to that now—or perhaps it's part of the same one. Did you notice Ann after dinner last night while the music was playing?"

Lanzerotti said, "I did notice that she seemed on fairly good terms with our host on somewhat short notice, but I assumed it was her own business."

"The trouble is that she can't tell why she did it," said Heidekopfer.

A little spot of red appeared in the girl's cheeks. "I told you because I felt like it," she said, "and I'm not particularly grateful for being pumped about it! Excuse me, I've got to charge my camera while you discuss my case." She got up, avoided Heidekopfer's protesting hand, and slipped out the door.

Lanzerotti said, "The case seems to call for diplomacy, and as the diplomat of the expedition, I prescribe a cooling-off period. Meanwhile, continue."

"There isn't much to continue with," said Heidekopfer, rubbing his chin thoughtfully. "You know as well as I do that her behavior with Samsonov wasn't—well, what you'd normally expect, even if it wasn't disgraceful or anything. But it seems to me that it's of a piece with the behavior of the castaways who decided to stay in Tolstoia. In both cases, there was what she herself described as an uncontrollable impulse to do something not normally done."

"Evidence of pattern," said Lanzerotti. "You think pressure was applied from outside. But how? Was the food or the beer drugged? No, it couldn't have been that; we ate and drank the same things, and weren't affected."

"I don't know," said Heidekopfer. "It

could have been a special for her. Samsonov hardly took his eyes off her from the first time he saw her."

"I—" began Lanzerotti, when a tap sounded on the door and Rosa Lanzerotti came into the room. "Hello, dear," she said, "have a good day?"

"Good with a little mystery in it, which we were just discussing. And you?"

She laughed. "The same. In fact, if you're up to a trip, the day isn't over yet."

"What do you mean?"

"There's a man outside with a droshky to take us to see someone who wants to meet you. I'll tell you the rest as we go. It might be a good idea if you come along, too, Bob. Wait till I get a rec-order." She went over to get one of the small size that fits in a pocket, and the other two stood up. Heidekopfer stopped to tap at Ann's door, but she didn't answer, so he stopped at his own room long enough to slip a light in his pocket, as it had grown quite dark outside. There was no one in the dimly-lighted halls; apparently most good Tolstoians had decided to call it a night. Outside, the heavy night mist which pinch-hits for most of Venus' rain was drifting past in streamers, condensing on everything it touched; Heidekopfer felt drops run down his face.

Rosa said, "He's waiting at the corner of the road, and I was warned not to let myself be seen, so you had better not put on the light now."

"Damn!" said Lanzerotti, stumbling. "All right, Rosa, what's the story?"

"We drove around most of the day looking at various views, while this Kazetzky person explained to me how beautiful it all was. It was, too. Stopped at a house where they were weaving cloth on a wooden hand loom and had some lunch, then drove around again. Kazetzky is not an interesting talker, as I began to realize about the fifteenth time he repeated his line about nature and happiness being connected. But toward dinner time he said, 'Ah! I shall take you to have a repast with a man who has in him much of the spirit of the Master.'"

THEY had reached the end of the drive, and in the dark could just make out the loom of the droshky. A voice said, "Little mother?" Rosa answered, "Okay, it's me," and Heidekopfer flashed his light briefly to enable them to climb into the vehicle. When they were seated and the driver had stirred his horse into action with the inevitable crack of the whip, Rosa went on, "He took me a little distance, little enough so it looked as though he'd been intending to do that all along, to a house almost as big as the one we're living in. Only the owner wasn't living in it, he was living in a tent pitched in a field outside by a stream. His name is Dubrassov, by the way. Kazetzky introduced me, and then went to the house and brought the family out and introduced them, too, ten or twelve of them. Dubrassov said I must bring you here at once, tonight, before it was too late, to hear something terribly important. They all said yes, I must, and then asked me whether I wanted to eat with the family or Dubrassov. Of course I said Dubrassov, and that was my big mistake. The meal consisted of a whitish liquid that tasted like turpentine and burned like it—"

"Kumiss," said Heidekopfer. "It has a kick, too."

"Apparently they have exceptions to their law about liquor. Anyway, I drank water. As I say, the meal consisted entirely of this kumiss and meat, nothing else, and we had to eat it with our fingers. He apologized for it, I will say, and said he was taking a cure of some kind. A diet like that would cure me of wanting to live."

For a moment there was silence as the droshky jounced along. Then Lanzerotti's voice said out of the dark, "Evidently there are disagreements, even in happy Tolstoia, and I'm grateful for the opportunity to learn what they are. But this whole business has a rather conspiratorial odor, and I'm not sure that a diplomatic representative should be mixed up in it. If you don't mind my saying so, Rosa, you might have given

us a chance to discuss all the angles before getting us out of the house."

"But I couldn't do anything else, could I?" Her voice sounded hurt.

The horse's feet clopped in the muddy road. Heidekopfer made a sound like the beginning of speech, then stopped.

"Beg pardon?" said Rosa.

"I just wondered—why didn't you come with us to see the school today? I should have thought you'd find it interesting."

"Oh, there's plenty of time. Besides, if I hadn't gone out to see the country with Kazetzky, I wouldn't have met Dubrassov."

Lanzerotti stirred in his place and said, "By the way, Bob, while you and Ann were looking over that farm this afternoon, I addressed myself to the matter of communications. They don't have to have any, except by word of mouth; the society is so static that there isn't anything requiring quick action by a large number of people, and they can afford to wait."

"Find out anything more about the governmental system?"

"They're disinclined to talk, but I gather it's an almost unchanged adaptation of the Soviet system. Which might be expected, seeing their ancestors came from there, and there's nothing in Tolstoi that would conflict with the system. As a matter of historical process, I'm a bit surprised that there should have been so little evolution—"

"Hell!" said Heidekopfer. "Vincent, when you get to talking theory, you're three parsecs over my head. I just want to know what makes things tick in a practical way."

"The difference is doubtless one of the reasons why we were associated in this mission," said Lanzerotti evenly, and that seemed to put a period to the conversation in the dark until Rosa said, "This must be it. See that light in the tent?"

HEIDEKOPFER flipped on his light and set it in the catch-ring of his hat. The beam diffused through the

drifting mist to catch a wooden house painted white and with shutters, on quaint, old-fashioned lines. It was all dark. The droshky pushed on past, bumping off the road across a field toward where a light showed dimly through the wall of a circular tent, and came to a halt. Lanzerotti jumped out and handed Rosa down after him. She approached and said, "May I come in?"

A deep voice boomed, "In the name of the Master, enter, little mother," and the three went in. They saw a powerful looking man, not as big as Samsonov, but with the same indefinable air of force, who barked, "Dubrassov, Alexei Ivanovich," and promptly sat down in the only chair in the tent.

This time the ambassadors knew the right reply. They made it, Rosa sat down on the bed, the others curled up on the ground floor of the tent and waited. Dubrassov glanced from Lanzerotti to Heidekopfer and back, with quick motions of his head and neck thrust forward, as though he were trying to see into their minds. Finally he said, "They make me take the cure as concisionary, but it is not I who am the concisionary, it is Pitrim Androvich."

"Indeed," said Lanzerotti.

"It is Pitrim Androvich," Dubrassov repeated. "The will of all is the will of one, but he makes the will of one the will of all."

"I thought the two went together," said Heidekopfer.

The burning eyes were fixed on him. "Are you the ambassador? It is anti-social to interrupt deliberations."

Heidekopfer felt himself flush a little, but said nothing. He could hear the buzz of Rosa's recorder.

"I am the ambassador," said Lanzerotti smoothly. "But I am accredited to the government of Tolstoia, and so far as I am aware, you are a private citizen. However, I will be glad to hear anything you have to say that may affect the question of whether the World Council should allow Tolstoia to colonize the Wrightley Islands."

"Pitrim Androvich wishes the world,

even holy Russia." He paused and blew his nose at the name, his Adam's apple moving. Heidekopfer remembered Behrmann. "You should n-n-n-" He stopped suddenly, gagging for breath, his eyes bulging, and then closed his mouth and tried again. "The achievement of universal brotherhood makes the will of all the will of one. It is possible to control the will of one for—" He gagged again, his mouth open, then closed his eyes with a grimace and said, "It is against the law to say more. Beware! And go, in the name of the Master."

## V

THE fact that Venusian trees of every species tend to trail their branches on the ground makes no particular difference; with approximately one day's direct sunshine during a Venusian year, shade is less important than what the tree produces and the decoration it provides. Neither, reflected Heidekopfer, would it particularly matter to people who were used to it that everything was mildly damp to the touch. The members of the Supreme Soviet scattered on the bank of the little natural amphitheatre around him seemed to be having a thoroughly good time, laughing, talking, drinking beer and listening to the music of the goose-necked instruments, which tinkled from group to group. He felt lonely, and Ann was somewhere else.

There was a touch on his shoulder and Lanzerotti sat down beside him, saying in a low voice, "All right, but talk fast. And smile now and then, so it will look casual. I understand how you couldn't discuss it last night with Rosa in the droshky."

"She got angry," said Heidekopfer. "Just like Ann."

"And you think you have the explanation?"

"You said something about pattern. It makes one. Mass hypnotism."

Lanzerotti gestured with one hand, as though he were pointing to the group around them. "I find that difficult to credit. The thing hasn't existed since the

days of the dictators and their wars."

"Remember that these people are the overflow of a totalitarian state. And I don't mean mass hypnotism with one person hypnotizing many, as among the old dictators, but with the group exerting mass pressure on one person. The will of all is the will of one."

Lanzerotti smiled. "I think you misinterpret. There is undoubtedly some pressure from what might be called public opinion, but—"

"Listen!" cried Heidekopfer, desperately. "It all fits together. Kazetzy twirled something bright in his fingers when he asked Rosa to spend the day with him, and all of them rallied round. They've achieved some kind of mental integration and they want to expand—"

Lanzerotti laid a hand on his knee. "You're talking too loud. And I think on the wrong lines. The nature of this development is essentially elymosynary—"

Heidekopfer experienced a sensation of being surrounded by stone walls as two of the Tolstoians stood over them. One was a member of the Supreme Soviet whose name he had, of course, forgotten, and the other was a remarkably pretty girl with ash-blond hair pulled back from a well-shaped forehead. He got up, as the man from the Supreme Soviet said, "Sonia Grigorevna is the cousin of the patriarch Pitrim Androvich."

"Heidekopfer, Robert Murrayovich," said Heidekopfer, dutifully.

Lanzerotti repeated his part of the formula, but the girl seemed to be concentrating on the reporter. "Is it not a joy to be in this beautiful countryside?" she said, looking at him directly.

"I find it so."

"Would it be your will to let me show you some of the flowers of happy Tolstoia?" she said.

IF HE were right, this was his chance to get one of them apart from the rest, where the group pressure would presumably be less effective. He said, "It would please me very much."

She reached out a hand to take his. "Come," and led the way across the bowl of green. A group of men and women stood in their path. "We are going to look at flowers together," the girl announced gaily. "Pitrim Androvich thinks it would be good."

They all seemed to find something delightfully humorous in this, and there was a burst of laughter as they crowded round. "Flowers are nature's key to happiness!" boomed one of the men, patting Heidekopfer on the shoulder. "You will see what fine ones we produce in happy Tolstoia."

He was suddenly aware that they were staring at him with a peculiar intensity in the midst of their animated movements, and of a slight tension, like the beginning of a headache, at the back of his neck. This must be it; he was being high-pressured for some purpose. It was understandable how they would call this the brotherhood of man . . . how they had developed the ability to put mass hypnotic pressure on any individual . . . how the castaways had been similarly pressured into adopting the Tolstoian way of life . . . how—"

Sonia Grigorevna's voice came through his reverie, "Are you dreaming, little father? Let us go."

He shook himself a little, like a dog coming out of water. "By all means, let us go." She was really beautiful, not with the broad Slavic features at all, but a narrow face and high cheek-bones that must have come from some remote Nordic ancestor.

The others waved hands as she led him up the gentle slope at the edge of the bowl, and pushed through a screen of trees into a field of lush grass. There was a string of bushes toward the river-bank. "The best flowers are there," said Sonia.

"Tell me," he said, "when someone really does not want to do something the rest want, how do you make them do it?"

She gave him a glance of puzzlement. "I do not understand. We do not make them do it. It is the word of the Master that everything savoring of compulsion is harmful."

Pretty neat, he thought . . . just like the Russian Soviets of the old days, who got away with dictatorship by calling it democracy. Aloud he said, "I know. But don't you ever have—deviationists?"

"Oh no. The will of all is the will of one. That is the brotherhood of man. But if a person doubts whether his will is fully given, he takes the cure. That is the law. This way."

She pushed through the bushes and they were on a slope above the river, starred with red poppy-like flowers. "Are they not beautiful? Let us sit here and contemplate them. The contemplation of nature is the source of happiness."

Heidekopfer lowered himself to the damp grass, blessing the forethought that had led him to dress in waterproof dylon. "They're very nice," he said, "but when did you Tolstoians discover the brotherhood of man?"

She settled herself comfortably against him. "I am not certain of the date. But it was in the time of the Patriarch Ilarion Triunfovich, long ago. Is it your will that we cease talking of material things and address ourselves to what we see?" She snuggled against him, and the pressure was not at all unendurable.

He placed a hand on one of hers. "Just one more question. When people come from the—outside, do you always will them to stay?"

"We do not need to. Everyone wishes to stay in happy Tolstoia. See how that blossom shakes on its stalk."

Except those who come back in boxes, he thought, and wondered how he could broach the subject, but before he could think out a way, she lifted his hand beneath her own and pressed it softly against her cheek. He turned to look at her; her lips were slightly parted as she lifted her lovely face toward his. . . .

And it struck him like a thunderbolt why the others had laughed when Sonia said they were going to see flowers at Samsonov's suggestion, and what the pressure had been on him for. He said abruptly, "Do you know where Ann went—the photographer who was with us?"

"To look at flowers with Pitrim An-

drovich." Her glance was neither disappointed nor hostile, merely a trifle wide-eyed as though she had just discovered something frightening. She let his hand drop.

## VI

SO THAT was the play, thought Heidekopfer, a trifle grimly. The Patriarch was going to make off with Ann while providing him with a substitute and putting the heat on him to accept. He scrambled up and reached a hand to Sonia Grigorevna. "Let's get back to the others, if it is your will."

Later, back with the others Heidekopfer confided his ideas. "If you will forgive me," said Lanzerotti, "I find your theory slightly fantastic."

"So do I," said Rosa. "I haven't been conscious of any sense of pressure or the headachy feeling you mention, and I haven't done a thing I didn't really want to do."

They were sitting in the ambassador's room at the Samsonov house, and it was not yet dark enough to make the candles necessary, although they were lighted. Ann wasn't there. Heidekopfer drew a long breath. "The only thing I can suggest is that you have been influenced too, to some extent. Come on, look at it objectively. Won't you admit the possibility?"

"As a matter of principle, yes," said Lanzerotti. "This is an island culture in the sense that it has been cut off from contact with others, and I'm well aware that island races often develop on aberrant lines. But I see no signs of the compulsions you mention."

"Not even Dubrassov? When he tried to warn us about something and couldn't?"

Lanzerotti smiled. "I'm afraid Dubrassov's case is a rather simple one of hallucination. It was explained to me this afternoon. They don't lock up their mental cases here; they simply let them take that cure, which amounts to a kind of shock-treatment in view of their usual habits."



"Damn it!" said Heidekopfer, but Lanzerotti held up a hand. "Listen, Bob," he said, "I quite understand your annoyance and the reason for it. And I will say that I'm a little surprised at Ann's behavior with our friend the Patriarch. But that's a purely personal matter, and shouldn't be allowed to cloud the diplomatic issue, which is above personalities. And on that level I haven't encountered anything to justify your apprehensions."

"The evidence of pattern? You mentioned it once before. The suicides?"

"The suicides were just suicides. I hinted at the matter and one of them—I think it was Vikhranov—came right out with the explanation without even being asked. It seems that the suicide cases among the castaways were people who had some strong tie or reason for going back, but still couldn't bear to leave Tolstoia once they got here. A simple case of a conflict they were unable to resolve."

Heidekopfer got up and began to pace the floor, his brow set in a frown. "Well, anyway," he said at last, "I might as well tell you that I'm doing something practical about what you call my apprehensions. After what developed at the picnic I radioed South Bergenland for a helio. It will be here tonight, and I'm going back on it and taking Ann with me. I advise you to come, too."

**R**OSA LANZEROTTI trilled a little laugh. "I don't think you'll find Ann particularly grateful—or particularly willing," she said.

"Then by God I'll get help to make her willing!" cried Heidekopfer.

"Wait—" began Lanzerotti, but he was already out the door and almost running down the corridor toward the apartment occupied by the Samsonovs. Not knowing what the custom was, he knocked. A female voice said, "Enter, in the name of the Master."

Mrs. Samsonov, looking as mysterious as ever, was sitting beside a table with one of the girls who served at table, sewing on something. "Good evening,

Robert Murrayovich," she said. "Pitrim Androvich is out this evening."

"As a matter of fact, it was you that I wanted to see," he said, "and alone, if possible."

She glanced at the girl. "Is it your will to leave at the desire of the little father?"

"The will of one is the will of all," said the girl, picked up her sewing and went through a door at the back as Mrs. Samsonov faced Heidekopfer. "What is it you desire to say, Robert Murrayovich?"

He hesitated. "Well, it's rather difficult, and I hope you won't be offended—but—"

"In happy Tolstoia we do not take offense at what Nature gives us to do."

"That's very nice of you. Well, it's about Miss Starnes—Ann Samuelovna."

"She is very beautiful."

"That's just the trouble, I'm afraid. Did you know that she went to look at flowers with your husband this afternoon?"

Anna Gulyevna's smile became a trifle more Mona Lisa than before, if possible.

"Yes, I knew it."

"And it doesn't worry you? Not even a little bit?"

"Not even a little bit, Robert Murrayovich."

"And he told her she should have children."

"It is good to have children." She smiled again at his hopeless expression and laid down her sewing. "Listen, Robert Murrayovich, and I will tell you how it is in happy Tolstoia. We have a law that a husband and wife must remain faithful to each other. So that if Pitrim Androvich looks at flowers with Ann Samuelovna, or even touches and kisses her, it is because he thinks she is beautiful, like a part of nature. Even though he is Patriarch he cannot break the law."

"But damn it!" said Heidekopfer. "I want to marry her myself!"

"Is it her will also? The will of one must become the will of all."

Heidekopfer experienced a violent sense of frustration. "Look here," he

said, "I know you have means of influencing the way people think about things. Can't you give me a little help with Ann?"

She lifted one hand and placed it beside her cheek. "She has achieved the brotherhood of man, and I think she will want to become a citizen of happy Tolstoia," she said. "If she does, the only way would be for the Supreme Soviet to pass a law that she must marry you. Thus the will of all becomes the will of one."

"But I don't want to stay in Tolstoia," said Heidekopfer, "I—"

Outside the door someone shouted, "In the name of the Master, may I enter?"

"Enter," called Anna Gulyevna, and the door opened on Kazetzky. His expression looked even more morose than usual. He said to Heidekopfer, "I am glad you are here, little father. Good evening Anna Gulyevna—I am the bearer of unhappy news."

"Unhappiness cannot remain long in happy Tolstoia," said Anna Gulyevna gravely. "What is your news, Pyotr Ilyich?"

"Pitrim Androvich is very desirous of the foreign woman. He has called a session of the Supreme Soviet for tonight, and will propose a law that a man may have two wives, so that he can marry her."

Heidekopfer saw Anna Gulyevna's hands tense in her lap and the secret smile dropped from her face. "That is most unhappy news, Pyotr Ilyich," she said.

"See here," said Heidekopfer, "can't something be done about this?" He looked at Kazetzky. "You're a member of the Supreme Soviet, aren't you? Can't you oppose the bill on the ground that it's—concisionary, or something?"

**B**UT they shook their heads, looking at him gloomily. "Well, by God, I'm going to do something about it if nobody else does," he said, getting to his feet. "Where's this meeting being held?"

Kazetzky did not move. "It is even

worse than you think, little father. Pitrim Androvich will propose a law of suicide against you."

Anna Gulyevna gasped and put one hand to her mouth. Heidekopfer looked bewildered. "What have I done and what's a law of suicide?" he asked.

"You are a resistant," said Kazetzky. "It was the will of all that you fall in love with the girl Sonia Grigorevna whom you took to look at flowers this afternoon, but it did not become your will. Therefore, it is evident that you are resistant to the will of all. We always pass laws of suicide against resistants, especially if they are foreigners. It is the only way of maintaining the brotherhood of man."

"I see," said Heidekopfer, and he did, with a sudden horrible clarity. So this was what had happened to the castaways! And how many others had been wiped out in these self-inflicted purges since they established their "brotherhood of man?" The hackles on his neck were rising, but he managed a laugh. "Well, if I'm a resistant, I guess I'm not going to worry about it too much."

Anna Gulyevna's face looked a trifle pale, even in the candlelight. "You do not know the strength of a law of suicide," she said. "It makes use of the death-wish, and those against whom it is passed cannot sleep until they sleep forever."

"Do you mean I have to take it lying down? I'm damned if I do!" He took four quick steps across the room, tore open the door and started down the hall. Kazetzky's voice behind him said, "A moment, little father."

Heidekopfer faced him. "Well?"

"What are you going to do, little father?"

"See Lanzerotti—Vincent Guidovich. He's the ambassador of the Council, and he isn't going to let anything like this go on."

"It will do you no good. This has happened before. He has accepted the will of all, and will not believe you until the law has been passed. When the two new laws are passed and the foreign

woman has married Pitrim Androvich, then you will commit suicide, and he will say, 'Ah, that is the reason he did it.'"

"You're so full of bright ideas you just slay me," said Heidekopfer with a wry twist to his mouth. "But I don't think you'd be batting them up unless you had something in mind. Come on, out with it."

Kazetzky said, "If you could leave Tolstoia and return where you came from before the law was passed, I do not think you would be in danger. There would be too many people around you with confused thoughts who do not belong to the brotherhood of man."

"And leave Ann behind to marry that old goat? No, I think not."

Kazetzky said, "Then there is only one thing to do. That is to go to the session of the Supreme Soviet and try to prevent the laws being passed. You are a resistant, and it is possible you could make their thinking confused enough."

Heidekopfer glanced at him sharply. "You want me to, don't you? What's your interest in this?"

"I am a supporter of Alexei Ivanovich Dubrassov. He is a traditionalist who does not believe happy Tolstoia should be extended as Pitrim Androvich wishes. If the law of suicide is not passed and you report against giving us the islands, there will be a law of suicide against Pitrim Androvich, and Alexei Ivanovich will be Patriarch."

Heidekopfer laughed shortly. "I thought there'd be some chestnut-pulling connected with this somewhere. How come that the will of all the others to follow the Patriarch's plan didn't affect you and Dubrassov, too?"

The man's face went sullen. "You have no right to ask me questions like that," he said.

Heidekopfer reflected that the development of their mental integration had not made the Tolstoians any the less Russian. "All right, let's go," he said. "Is it far?"

"At the schoolhouse. I have a droshky which I took to bring Anna Gulyevna the news. It is not good to let bad news

delay until the will of one becomes a resistance."

"Okay. Wait just a minute, will you, while I get my pocket radio. I've got some friends coming who may be some help, and I might want to get in touch with them."

## VII

THE lights behind the windows of the schoolhouse made vague islands in the dark pennons of mist. Kazetzky got out and tied the horse to the hitching-rail as Heidekopfer dismounted. "Go in, little father," he said. "I will stay outside as long as I can." He was breathing hard, as though trying with all his strength to resist some kind of compulsion.

Heidekopfer checked the sets of his radio, walked to the door and flung it open. The fifteen or twenty men and women of the Supreme Soviet were seated in chairs scattered in no particular order around the classroom, with Samsonov at the teacher's desk, his back to Heidekopfer as the latter entered. But the thing that made the reporter catch his breath as the faces turned toward him like flowers toward the sun was the sight of Ann Starnes, sitting just to the right of the Patriarch. Her glance was coldly unfriendly.

For a second or two the tableau held. Then Samsonov turned round and rose majestically to his feet. "The session of the Supreme Soviet is secret," he said, and glared.

Heidekopfer once more felt the headache sensation at the back of his neck, accompanied by an almost overwhelming impulse to get out of there, to escape from that place before something dreadful happened, a strange malaise, which he could not name possessed him. He staggered back a step, then caught Ann's eye fixed on him with the same quality as the rest, and was abruptly seized by another impulse, even more overwhelming.

The second one struck him as a better idea, anyway, so he yielded to it. He took three rapid steps toward the Patriarch Samsonov and let him have one

fetched up from the region of the belt-line.

It took the big man flush on the button, and down he went, thrashing and kicking, as the room burst into a turmoil of shouts and chairs knocked to the floor. Ann screamed. Heidekopfer grabbed her by the arm. "You're coming with me whether you like it or not," he said in English, and turned to face the group menacingly. But nobody seemed inclined to offer him any opposition, and the thought flashed through his head that they probably had a law against physical violence, too.

Samsonov had hauled himself to his feet with the aid of the desk. There was a little trickle of blood from his mouth and his eyes were dead. The last thing Heidekopfer heard him say as he pulled the girl through the door was, "There will be a law—"

Kazetzky had disappeared. Ann was limp as he bundled her into the droshky, and didn't say anything until he had unhitched the horse, climbed to the driver's seat, and with a combination of yells and jerking on the reins, urged it into plodding motion. Then she said, "Oh, Bob!"

He didn't turn around. "Yeah. What is it?"

"I was hating you. I knew they were going to pass a law that you should commit suicide, and I was going to help them."

"Nice of you."

"When you hit him, something happened. It was like coming out of a dark room into the sunlight . . . Bob!"

"What is it?"

"I think I need a keeper. I'll marry you when we get back—if we ever do." She began to cry.

This time he swung round on the seat. "Listen, angel," he said, "I want you just enough to take you up on that, whether it's on a rebound or not. But are you sure you're out from under the control that big lug seemed to have snapped on you?"

"I—I—think so. But I don't know how long it will last. Get me out of here, quick!"

OVERHEAD, a beam of light stabbed down through the crowding mist, just picking out the corner of Samsonov's house a few hundred yards beyond them, and there was a sound of ghostly wings. The beam shifted, ran along a line of trees, and then satisfied itself with an open field.

"The helio," said Heidekopfer. "I radioed for one on the chance I could get you away." He tried to urge the horse to greater speed as lights came on in the building and the aircraft swung in for a landing in a pool of its own illumination. Abruptly, the headache sensation took him in the back of the neck again, stronger than ever, accompanied by an intolerable sense of depression, and the night was suddenly full of horrors ahead. It was not worth the trouble. He felt the reins loosening in his hands. "Ann!" he cried, "Ann . . ." and blacked out.

He came to to the sound of purring motors and struggled to sit up. Someone said, "Give him this," and a cup of coffee was held against his lips. He looked up into Ann's face.

"Still feel the same way you did in the droshky?" was the first thing he said as he drank.

"Sssh. Yes," she said, and he looked round to see the Lanzerottis smiling at him across the cabin of the helio. He struggled upright on the transom. "That was a narrow one," he said. "I think they must have passed the law of suicide against me. But I can't figure out how it would affect me so. They said I was a resistant."

Lanzerotti said, "Thought can operate without physical presence. The Christian Scientists and Theosophists on earth knew that years ago. And this was a rather massive impact."

Heidekopfer shook his head. "Give me a little more of that stuff, will you? I'm still a little groggy. What I can't figure out is how you two got away and came along."

"We were talking about that," said Lanzerotti. "Rosa and I were just getting ready for bed, when it suddenly struck us that everything you had said

was true, and the Tolstoians had us under control and were showing us, in effect, a Potemkin village. When you knocked Samsonov out, even for only a moment, the control snapped on us as it did on Ann. Then he got so interested in passing the law of suicide against you that he didn't have time to rebuild his fences. So we got away, but we had to leave most of the records."

Heidekopfer drank again. "I don't suppose it makes much difference, though," he said. "Our verbal report ought to be enough to keep the Council from giving them the Wrightley Islands. My God, if that thing got loose! With what they've developed they'd be able to take over every inch of the three worlds, little by little, and turn them into more Tolstoias."

"No," said Lanzerotti emphatically.

"No what?"

"My recommendation will be that we grant them the Wrightley Islands and any other bits of uninhabited territory they happen to want—but only for so long as Samsonov remains Patriarch."

Heidekopfer's mouth fell open. "What!" he exclaimed aghast, "Has he still got you under?"

Lanzerotti's smile was bland. "Not at all. They've attained the goal of the totalitarian state. They've got everybody thinking alike. Remember, Dubrassov couldn't warn us, even when he wanted

to, although he couldn't bring himself to go along with Samsonov's expansionist policy. Samsonov showed us Potemkin villages, all right. But don't you see what all this crazy set-up adds up to? These people can't change. They've lost their adaptability.

"The system has to be rigid, because the first time anyone expresses an individual idea, the whole totalitarian structure will collapse. They're inbred and interlocked, and Samsonov has complete control of their thinking and their behavior—for the time being, at least. But as soon as the Tolstoians expand to the Wrightley Islands, or anywhere else, they'll be facing conditions they've never before encountered. They'll have to learn to think for themselves again—"

"—And as soon as they start to think new thoughts, Samsonov's power will evaporate. He'll lose his grip, just like he did on me!" finished Heidekopfer, reaching for Ann's hand.

"You see," concluded Lanzerotti, "Dubrassov was the really dangerous one. He didn't have new ideas, and whether they were castaways or not, more people would have been drawn in on him."

The little group was quiet, contemplative, then they smiled knowingly at one another.

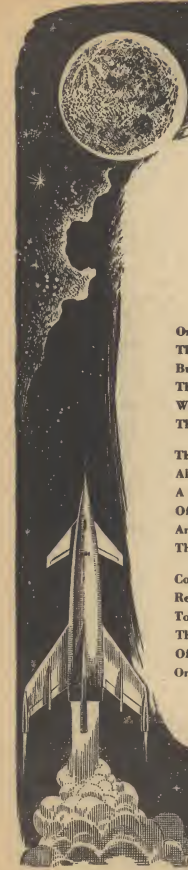
"Let's get home," said Ann, "and make our—my last picture."



COMING NEXT MONTH

## THE SHORE OF TOMORROW

*A Novelet of New Worlds* by CHAD OLIVER



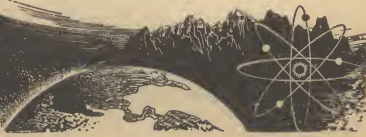
# SESTINA of the

By  
PHILIP JOSÉ FARMER

One thing is sure, O comrades, that the love  
That fights to keep us rooted in the earth,  
But also urges us to dare the stars,  
This irresistible, this ancient power  
Wedged in the soul, unshakable, is the light  
That burns our roots and leaves us free for Space.

The way is open, comrades, free as Space  
Alone is free. The only gold is love,  
A coin that we have minted from the light  
Of others who have cared for us on Earth  
And who have deposited in us the power  
That nerves our nerves to seize the burning stars.

Courage, comrades! Let the fire of stars  
Reflect their flames in your hearts till men lack space  
To say enough of the inexpressible power  
That gives the strength to sever us from love  
Of beautiful women, strength which makes large Earth,  
Once so close, now only a spurt of light.







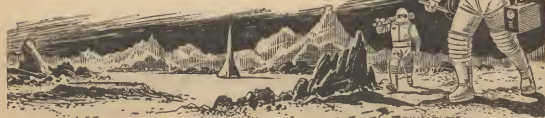
# SPACE ROCKET

Eyes forward! Sing a paean to the light  
That God gives us to net the distant stars  
In eyes that once were blinded with black earth.  
Man had no time for aught but toil, no space  
For aught but war. Yet God, in His great love,  
Has cleared our eyes and given a hint of Power.

Now we have lit a candle to the power  
Of atoms; now we know we're heirs of light  
Itself and know no more that flee whose love  
And hates are far from us, as far as stars  
Once were, now let us swear to leave no space  
Unconquered till we find a better earth.

Yes, we hope to seed a new, rich earth.  
We hope to breed a race of men whose power  
Dwells in hearts as open as all Space  
Itself, who ask for nothing but the light  
That rinses the heart of hate so that the stars  
Above will be below when man has Love.

God, Whose hand holds stars, as we lump earth  
In our fingers, give us power, give us light  
To hold all love within our breast's small space.



# Can Mechanical Brains Have Consciousness?

By GOTTHARD GUNTHER

**I**F BY mechanical brains you mean the modern calculators like Vannevar Bush's Differential Analyser (which you could watch in action in the film "When Worlds Collide") or one of the digital computers like ENIAC, EDVAC, UNIVAC and MANIAC, let me assure you that *none* of them can think. Nor will any of the more advanced models which man may build along these lines in the next centuries. And the same holds for the recent designs of logical computers: neither they nor their technically most advanced descendants will ever think.

How do I know? I admit that you will not find a single cyberneticist or designer of a computing machine who would be prepared to make such a sweeping statement. The general attitude among the scientists concerned can be described as follows: thinking is a specific form of consciousness; however, nobody knows what consciousness really is, let alone how it can be produced by mechanical means; so your guess is as good as mine. And, indeed, a lot of wild guessing is going on. Some people passionately maintain that mechanical contrivances will never acquire consciousness—ergo they won't think even after Doomsday. Whereas the opposite party blithely advertises that robot brains of present design are on their way toward learning how to think, and that all is just a mat-

ter of time and a bit of patience.

Both opinions are misguided by entirely unwarranted assumptions. The skeptical viewpoint of the first party implies that we are not only at the present stage of science completely ignorant of what consciousness really is, but that we shall never leave that state of ignorance—the reason being that consciousness is a manifestation of a metaphysical soul of man and therefore of divine origin. Of course, you can't design that. You might as well start with the blueprints for the archangel Gabriel!

The other group, however, assumes, equally erroneously, that we do not *have* to know what consciousness is: that it is just a word or label for the abstract sum of all our perceptive and apperceptive functions. Ergo, if we reduplicate all those functions of sensitivity, memory, learning, capacity to make decisions, quantitative and qualitative reasoning, etc., through the medium of mechanical procedures, we have produced consciousness and thinking in a man-made machine . . . because consciousness has no independent "physical" reality outside its own functions. Consciousness is, as the nominalists say, a mere name by virtue of which we comprehend and lump together an extremely diversified array of brain actions under a general and abstract heading. There exist horses, dogs, birds and snakes; but

Do our thinking machines . . . THINK?

Here's an eminent metaphysician's answer!



*The Elecom 100 electronic digital computer, first of the "baby giant brains" to be mass-produced at low cost. Electronic Computer Corporation, New York City, manufacturer.*

there exists no animal. "Animal" is just a name, and so is "consciousness."

This theory is equally false, since it has been discovered that consciousness is an existing and most intricate mechanism apart and separated from its own functional proceedings. This discovery was made and expounded in Kant's famous work "The Critique of Pure Reason," and from there a new scientific discipline has evolved, usually called: "transcendental logic."

The first systematic treatise of this new type of logic was Hegel's "Phenomenology of the Mind." But don't try to read it. It has been called the most difficult book ever written in the history of mankind. The English philosopher Hutchinson Stirling, who wrote a comprehensive book on Hegel and his logical theories, titled his work: "The Secret of Hegel," in consideration of the difficulties of the new type of logic. After Stirling's book was published the joke went around among logicians: if Hegel had a secret, then Stirling kept it well.

Due to the enormous intricacy of the subject matter, and the obscure manner of representation by Kant and his followers, the established results of that new logical discipline have not yet penetrated into the circles of cyberneticists and designers of computing machines. There are two reasons for it, the first one rather personal: you can't get to the bottom of transcendental logic without first being very well versed in symbolic logic,

Aristotelian logic, psychology, psychiatry, and last but not least, ontology (general theory of objects). Only now have mathematicians begun to take in symbolic logic; and rarely do they advance beyond the technique of logical plumbing.

The second reason is to be found in the as yet rather undeveloped state of cybernetics. This new and amazing discipline has not yet arrived at the level of problems where the procedures of transcendental logic put in their appearance. Consequently, the provisional neglect of Kant's reasoning about "transcendental" mechanisms in the mind has had no ill-effects—so far at least—on the progress of engineering of mathematical and logical computers.

However, the story is quite different with regard to the universal theory of mechanical brains. The present discussion of the question: can a mechanism really think? (in other words: can they have material thoughts *accompanied* by consciousness?) is a clear symptom of a basic confusion. Here transcendental logic might be helpful. I shall therefore develop on the next few pages the theory of consciousness as established in transcendental logic. My exposition, incidentally, will avoid all original Kantian and Hegelian terms (with one notable exception) and will adapt itself to the technical requirements of modern cybernetics. (The scientific reader who might take exception to the simple terms and primitive similes employed in this article

## About the Author of this Article ~~~~~

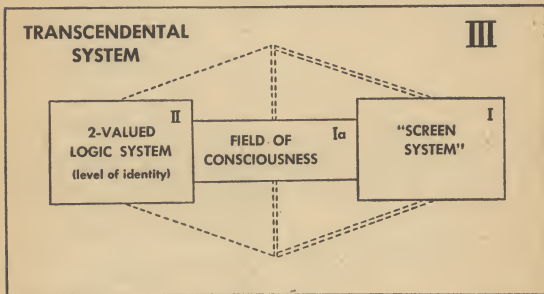
**GOTTHARD GUNTHER:** formerly lecturer in philosophy (logic and philosophy of history) at Leipzig University, Germany (1939). Left under Hitler, going to South Africa as Carnegie lecturer at the University of Capetown, Stellenbosch. Arrived in U. S. A. 1940. Till 1944 was lecturer and assistant professor at Colby College, Waterville, Maine; since 1945 engaged in research work on problems of a non-Aristotelian logic and its application to problems of history. Has published two books: *Grundzüge Einer Neuen Theorie des Denkens in Hegel's Logik* (New Elements in Thinking in Hegel's Logic) and *Christliche Metaphysik* (Christian Metaphysics). Now resides in Richmond, Va.

is referred to my book: "Elements of a New Theory of Thinking in Hegel's Logic" (Leipzig 1933). This book presents the same theory minus the cybernetic viewpoint with the necessary scientific rigour.

**T**O BEGIN with: the skeptics who insist that mechanical brains are intrinsically incapable of conscious thought are wrong. This can be confidently asserted, because transcendental logic is capable of a satisfactory definition of what human consciousness really is

does not know what is happening. The light that bounces from it is reflected into *our* eyes, and only we, the audience, are conscious of the events of the film. Therefore those reflected events are not reflection-in-themselves.

The story would be entirely different if the light were not thrown back at us, the audience, but were instead reflected back upon the *projector* and its optical process of projecting the images against the screen. Then *we* would not be aware of the whole affair. All possible consciousness would then be vested in the



*and how it works!* With this definition we introduce our one and only original transcendental term: consciousness is *reflection-in-itself*. But what does that mean?

Everyone knows the simple phenomenon of reflection. You have only to look into a mirror in order to see the reflection of your face. You also see an extended series of reflections when you watch a movie on a theater screen—in which case it is the white screen that reflects (throws back at you!) the changing images of the film. Surely, then, the screen reflects events; but nobody who is in his right mind would say that the screen has consciousness. For the screen

optical events going on between screen and projector. However, let us not stretch this simile too far. It only serves to give an approximate idea of what transcendental logic means when it uses the term: reflection-in-itself.

Now: consider your own consciousness a sensitive "screen." This "screen" receives, through your sensorial system, messages from the outer world. Neuronic impulses coming from your eyes, your ears, your skin, your muscles, etc., impress themselves upon that "screen" and are *reflected*. But this reflection is not thrown back at the world-system from which it came (as in the case of the mirror or the movie screen). In-

stead, it is thrown into a deeper recess of your brain, turns around and appears a second time on your brain-"screen," superimposing a second reflection on the first. This *second appearance* establishes the miraculous phenomenon which we call "consciousness."

Let's illustrate this process with a simple example: you are aware of a flower. This object of the outer world sends messages through your senses to your brain-"screen," where a picture of the object is formed. The picture bounces off the "screen" as unconscious message: "a rose." Then it goes to some other part of your brain, and returns to the first place with the superimposed content "acknowledged." Now the image on your brain-"screen" has a functional depth-dimension which is expressed in the statement: *I see a rose*. The original message "a rose" does not establish consciousness, because it is a simple reflection, not unlike the one in the mirror; but *the returning message does*, for it is a reflection-in-itself—or as we moderns should rather be inclined to say, it is a reflection upon itself.

NOW, it is obvious that we should be able to design consciousness technically if we could find out what happens to the message after it has been first received on the screen of our brain and before the later moment, when it returns to it with the stamp "acknowledged" and produces consciousness by its second impact on the screen. (Incidentally, the time-lag between the two moments is so small that it is unobservable by the normal method of introspection.)

Fortunately we know what happens to the message during this reflexive interval, and it is this theory of the brain processes during the round-trip of our message that is called "transcendental logic." Our verb "to transcend" means "to go beyond" (Roget's Thesaurus, 303) and we are entitled to ask: what did Kant mean by using this term? To go beyond . . . what? The answer is simple, but quite unexpected. Till the publication of "The Critique of Pure

Reason," philosophers and scientists had entertained the following ideas about the origin of consciousness: they said, our mind is like a jug into which you pour water. The water while it is poured is in a rather chaotic state. The jug, however, stills it, and forces the fluid to adopt its own hollow form. According to this theory, then, our consciousness is a system of hollow forms into which are poured all the sensations, impressions and stimulations which our nerve system transmits from the outer world. But these transmissions arrive in a rather chaotic state. They become conscious only by being submitted to a forming and ordering mechanism which gives them their final (i.e. conscious) shape. The scheme is so simple, and moreover—as far as it goes—absolutely correct, that even nowadays 99.999% of all people adhere to that explanation.

They say: our mind has two fundamental components, namely contents and forms, and if the two come together the result is consciousness. If we talk about the universal reservoir of possible contents of our consciousness, we say: "material world"; if we talk about the jug these contents are poured into, we say: "formal logic."

The first description of our forms of consciousness, and how they work in order to shape the incoming material, was originally given by Aristotle. Since then, "formal logic" and "Aristotelian logic" have been historically equivalent terms. However, the "jug" Aristotle described was comparatively small. The Stoics, later, enlarged it a bit; and since the introduction of Boolean algebra it has been discovered that all our previous conceptions about the size of our "jug" have been ridiculously conservative. The "jug" is still growing. Now it is usually called: mathematical logic; but it is still of course the same venerable vessel of ancient origin: a *formal* logic—meaning the theory of a mechanism that forms and orders contents.

The only trouble is: if you pour water in a jug, this vessel does not become water-conscious; and if you charge a



battery the battery does not become electricity-conscious.

This did not disturb the philosophers of the Platonic and Aristotelian tradition. They said: it is different with man. Man has a soul. The inanimate object has not; and you need in addition to that synthesis of forms and contents a Self that watches that synthesis, thus finally producing that miraculous phenomenon: consciousness.

To the scientist, of course, the introduction of the term "soul" is nothing but a very polite way of saying: there is something in addition to this form-and-content business, but we don't know what it is. It was Kant who in his "Critique of Pure Reason" eliminated the concept of "soul" from the theory of logic (earning him an indictment of "atheism") and who stated that beyond the mechanism of formal logic there is in our brain a second mechanism which works on entirely different principles. It does not *form* messages any more but *carries* them through processing stages and finally returns them to the original "screen," the identity level of the formal logic. Insofar as this carrying capacity which transports the messages first *beyond* the screen is the most outstanding feature of this second brain-mechanism, Kant called the theory of it "transcendental" logic.

THIS theory is capable of demonstrating that if the message "a rose" is carried beyond the original "screen" and processed in a well defined manner, then the concepts "I" and "perception" are added. These additions, however, do not by themselves produce consciousness. They are *pre-consciously* attached. Only when the thus modified message returns to the screen is consciousness actually produced.

This happens in the following way. The returning message does not return to all parts of the screen, but only to two sections of it, called "memory" and "identification" (the classical axiom of identity). The memory still retains the original pattern (unconscious):

"a rose";

on which is superimposed (unconscious):

"I see a rose."

Identification now produces a *confrontation* by attempting to establish a one-to-one correspondence relation between the original pattern and the enriched second message. This does not work! It turns out to be impossible to establish, by confrontation, a one-to-one correspondence between "a rose" and "I see a rose." The first part of the second sentence: "I see . . ." overlaps. In other words: the reflection-in-itself produces something that cannot be identified with the mere content "a rose." A tension of meaning is created—a tension between identity and non-identity. And this is the moment when consciousness and conscious thought comes into existence. No mysterious soul is necessary to explain the workings of consciousness. It should, however, be stressed that transcendental logic demonstrates only that consciousness is a mechanical process. Consciousness is that state in which a person is aware of the objective world. In other words: consciousness is equivalent to being aware of objects located outside the system of awareness.

It is quite a different story whether self-consciousness is also mechanical and therefore artificially reproducible. Self-consciousness is not awareness of objects, but of awareness itself. It is awareness *of* (awareness of objects). Transcendental logic, in its present form at least, does not extend over the range of this new problem. If I am permitted to voice an opinion, I should like to say that I do not believe that self-consciousness in its full dimension will ever be reproducible. Maybe carefully isolated fractions thereof—but that is the most we should hope for, and even this very limited ambition may find some realization only in a very distant future and on a considerably higher historical level than we are living on now.

However, the theory of transcendental

logic enables us to discuss intelligently the question whether mechanical brains may have consciousness (*not* self-consciousness, mind you!). From what we have said on the preceding pages of this article two conclusions can be drawn. First: genuine mechanical brains, which would deserve that name, would have consciousness. Because, if consciousness is a process whose workings can be described by an exact logic, then it can also be reproduced mechanically. (After all, symbolic formulae are nothing but a mechanism projected on paper.)

The second conclusion is: none of the present designs of logical or arithmetical computers, be it digit or analogue machine, can ever be brought to such a perfection that it may eventually attain consciousness. Consciousness simply does not lie in the direction where progress is at present being made. Our present designs try exclusively to solve the problem of how to reflect information upon a mechanical system. This problem has two technical aspects:

a) how to transpose physical events (e.g. electrical impulses) into patterns of information,

b) how to use these patterns as "motives" for operational procedures that follow the formal laws of identity, forbidden contradiction and excluded middle.

But this is simple physical reflection, modified only according to the peculiar properties of information. It is not, and will never be, reflection-in-itself. Technical aspect "a" repeats the sensorial transmission of messages by the human organism to the "screen" within the brain. Aspect "b" repeats the ordered arrangement of the data upon the screen. It is quite possible that these mechanisms within the present types of calculators shall finally be so perfected that they surpass beyond all imagination the functions of the human brain which they parallel. Nevertheless, none of these technical wonders shall ever have consciousness, because that "carrier"-mechanism is lacking that permits the information to bounce off the screen and re-

turn to it in a modulated manner for the purpose of "confrontation."

**IT FOLLOWS** that in order to produce consciousness within a mechanical brain, entirely new designs will be necessary. These novel designs will contain as sub-systems the present type of calculator (although in a considerably improved variety) with a very significant additional feature: these sub-systems must perform their own coding. The reason is obvious: as long as man does the coding, the logical principles according to which the calculator is working are located in part outside the machine: are represented by the actions of the person who does the coding. As long as that is the case, the calculator is not in the possession of vital information (retained by the coder) that is needed to whip the information into proper shape for the transcendental "carrier" operation.

As this point is of utmost importance, let me rephrase it! In the present calculators only a small fraction of the whole system of formal logic is incorporated into the electronic mechanism. The greater part of it is still handled by the human operator of the machine—a factor in the operation which, of course, does not turn up on the "screen." This means: the logical information the "screen" receives is incomplete. And you cannot reflect an incomplete system upon itself! (One of the main theorems of transcendental logic.) Thus the designer is forced to build the whole system of formal logic into any calculator which (or is it from now on: who?) is supposed to think for itself (himself?).

For the time being, *we*, the humans, operate the calculators. But if a mechanical brain possesses consciousness, it is supposed to operate itself. Autonomy of action is one of the necessary prerequisites of any form of consciousness. A plant is rooted to the soil. It has no freedom of action, and we are fairly certain it has no consciousness either. An animal has freedom of action in the world, and there is no doubt that the ani-

mal organism is endowed with consciousness.

We humans are gifted with two forms of consciousness. On the lower level our powers of awareness are purely animal. However, the human organism has developed a second system of self-determination, the rational mechanism of logic. And as much as the animal organism of the body is necessary for a *conscious* orientation in the world in terms of physical action, so is the rational mechanism of logic the necessary vehicle for *conscious* orientation and action in the realm of abstract thought.

However, you always need the whole system for autonomous (conscious) operation. There is a story in European folklore of a blockhead, who was a skinflint to boot, who argued: "I need my horse for running. For running he needs only his legs. His head doesn't do me any good. He needs it only for feeding. If I chop off the head I shall save the food, and still have the legs for running." It seemed quite a convincing sort of argument. So this blockhead cut off the head of his horse—and got the surprise of his life when the four horse-legs refused to run afterwards.

In abstract terms: conscious action demands a complete system; and a horse without a head is not a complete organic system.

Similarly it is quite impossible that a mechanical brain can ever consciously think without having a complete system of logic built into it. Our present designs contain only fragments of logic. None has the concept of identity as systematic integration of all (potentially conscious) procedures built into it. The symbolic formula for the definition of "identity" is:

$$(x=y) =_{\text{Def}} (f) [f(x) \equiv f(y)]$$

This expression can be read: Two objects (of our consciousness) "x" and "y" designate semantically the same object (in the world) if any two corresponding statements, " $f(x)$ " and " $f(y)$ ", which contain these symbols in

corresponding places, have equal truth-values.

This formula shows: it is not sufficient to build the calculus of proposition and the calculus of classes into a mechanical brain which is supposed to think for itself. You have also to design the calculus of functions into it; and not only the calculus of simple functions, but also the extended calculus of functions (of functions). This latter task is beset with enormous difficulties. The functional calculus of second order implies the logical as well as the semantical antinomies. It can be shown that a mechanical brain which really possesses consciousness must be subject to the pitfalls of (human) thinking in exactly the same manner as we are.

AT PRESENT we have neither the theoretical nor technical implements to complete such a task. A logician who knows his higher calculus functions might well say that the difficulties are absolutely unsurmountable. I should agree with him—if we were called upon to design an exact replica of the human system of thinking. But we are not. The human system of logic covers not only consciousness, but also self-consciousness. The designer of the mechanical brain, on the other hand, has only to deal with the problem of consciousness. That permits certain simplifications which the logician who describes the human system of thinking cannot afford. Therefore, I think, it should finally be possible to replace the human system of thinking which operates the calculator with a built-in system of robot-thinking that operates the brain internally.

This mechano-logical operator would be included in the "transcendental" carrier-system. A mechanical brain endowed with consciousness would consequently not be a simple, epistemologically homogeneous mechanical system (as the present calculators are—and you'd better revise your ideas of what is "simple"!), but a very complicated system of systems with entirely heterogeneous modes of activity. A primitive draw-

ing might help, as shown in the accompanying diagram of the transcendental system. (See diagram on page 111).

None of the present calculators has a design beyond system (I). In fact, our modern machines fill only a very small fraction of (I), with some tiny scraps of (II) thrown in for good measure. Both systems, (I) and (II), share equally in the field of consciousness (Ia). But before consciousness can be mechanically created, all messages arriving at (I) are first carried into the "transcendental" system (III). From there they return to (I), resp. (Ia). This roundtrip is effected by a feedback mechanism. This is a discovery of Hegel's, who describes consciousness as a logical feed-back in his "Phenomenology of the Mind" (pp. 193-221, and 549-564 of the edition of 1928). Our dotted lines indicate this primary feedback mechanism. But there is a secondary feedback which connects (II) with (III) and (I). The feedback connection between (II) and (I) should be indirect, especially as there is a direct connection through (Ia).

This drawing should, of course, not be interpreted as a blue-print, however remote, of the ultimate technical reality. It is merely an illustration to show how little has been done as yet towards the

realization of the idea of a genuine mechanical brain.

You can see that the systems (II) and (III) may be thought to represent what, in the mythological language of mankind, is called a "soul." If you just say "soul," you mean system (III); if you speak about a "rational soul," then you add (II) and (III) together.

The general concept of system (III) dates as far back as Plato's dialogue "Theaethetus." In order to demonstrate that consciousness demands an integrating unity, Plato uses the example of the Trojan Horse. Inside this horse were seated many Greek heroes, like Ulysses, Diomedes, and others. But although there were brain functions going on "inside" the horse, this wooden monster did not derive any consciousness from them. Accordingly, young Theaethetus is told: "It would be a singular thing, my lad, if each of us was, as it were, a wooden horse, and within us were seated many separate senses, since manifestly these senses unite into one nature, call it soul *or what you will*; and it is with this central form through the organs of sense that we perceive sensible objects."

There is little doubt that our present "thinking" machines are hardly more than wooden horses.

**A Cosmic Manhunt Through Time and Space—in a**

**Novel That May Answer YOUR Questions**

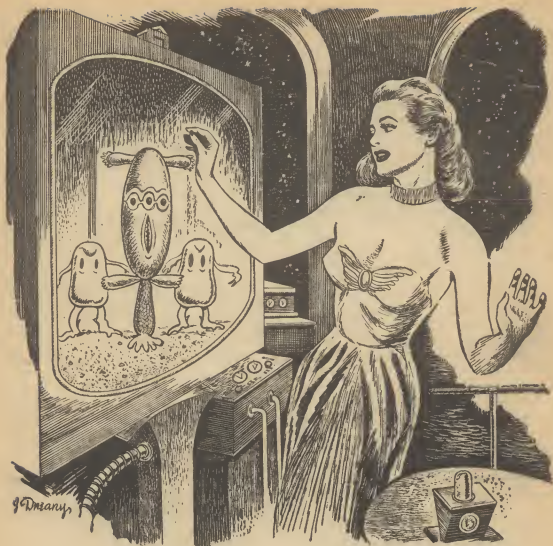
**About the Flying Saucers!**

# **CENTAURUS**

**By SAM MERWIN, JR.**

**FEATURED IN NEXT MONTH'S ISSUE!**





A doorway dilated and something hopped in

# DEFINITION

By DAMON KNIGHT

Who would have the last  
word, or the last laugh—  
Man . . . or Kassid?

**Man**, *n.* A pentagonal, dipolar, monoplane dominant, of intelligence 96, native of District 10039817. Unabsorbed.

**I**T IS a truism that a human being can get used to very nearly everything. The hardy Eskimo, lying belly-down on a plain of ice that stretched unbroken to the sky, probably spent little of his time in meditating upon the vastness and inscrutability of the Universe . . . he was thinking of his dinner. And Charles Samson, seven hundred years later, looked past his long nose at a scene of equal majesty—our galaxy, viewed from a ship

in mid-arc—in a similar frame of mind.

It was approximately sixteen hours, galactic time; a trifle later according to Samson's stomach. He had played a vicious game of handball with his wife an hour and a half before, and now he was hungry.

The Eskimo, although a patient man, might have reflected that it was unreasonable of this particular seal to wake up and look around him at this precise moment. Samson, equally virtuous, told himself that his wife might have chosen a more opportune time to experiment with her cookery. Midge had conceived an idea for a soufflé such as had never before been seen by Man, and had accordingly been adding new circuits to the autochef for the past eighty-five minutes.

If she ran to form, the soufflé—which would be a triumph, in spite of seven-teen separate miscalculations—would be served in about twenty minutes more. Samson would have preferred an artless slab of steak *now*.

These, it may be considered, were picayune thoughts, to occupy a brain which had been interminably trained and tested, stocked with a fabulous assortment of knowledge, and then sent out, with one other human mind for company, to patrol a hegemony ten billion times as vast as Caesar's.

At the moment, however, there was nothing world-shaking for it to do. Charles and Midge, like a thousand other teams of trouble-shooters assigned to the volume of space known as Slice 103, earned their pay by intense, difficult, and sometimes dangerous labor which averaged three months out of the year; the rest of their time was spent in traveling from one assignment to the next, or simply in drifting, waiting for something of importance to turn up.

Two days ago, for example, they had been halfway along a leisurely arc between the Hilkert system and the observatory settlement on de Broglie II, when Slice H. Q. had buzzed them and told them to change course for Kenilworth IV—an isolated and obscure one-man post out on the perimeter of the

Slice. Tomorrow, as likely as not, another message would inform them that the trouble, whatever it was, had simmered down. Then they would blast into a new arc, and it would be six days, at least—even if another wild-goose chase did not intervene—before they touched ground. Meanwhile, they amused themselves as well as they could. . . .

AS FOR the stars, which lay spread out to the infinity beyond the inch-thick vitrin of the ship's veranda window, the trouble with them was that they were always the same. Maugham records that when he first saw the Taj Mahal, he felt an ineffable surprise and joy; but on the following day, it was only a beautiful building. He had seen it before.

Samson had been in space for something over half his lifetime. Accordingly, when the communicator bell rang, it shattered no meditations on the relations of Man to Nature; on the contrary, Samson, uncoiling himself and walking through the doorway into the lounge, carried with him the firm mental image of a ham sandwich, with relish and mustard.

"Let's hear it," he said.

Obediently, the communicator uncorked a quiet male voice: "Harlow calling the Samsons. Acknowledge if you're awake, will you? Over."

Midge appeared at the opposite end of the room, brushing a strand of black hair back from her forehead. "We read you, Harlow," said Samson. "Go ahead. Over." The light-tube which encircled the ceiling, having turned pink at Harlow's "Over," glowed spectrum-white again at Samson's, indicating that the communicator was ready to receive.

"Something?" said Midge, coming forward.

Samson waved his hand at her, palm down, in a gesture that meant "Shut up and listen." Simultaneously, Harlow's voice began again: "I'll give you the story, anyhow; you can pick it up from the cube later if you're not reading me



now. Kids, this Kenilworth thing is a lot bigger than it looked two days ago. It may be even bigger than I think it is now, in which case we'll all have to start digging hidey-holes. It's all yours—I haven't got anybody else within two weeks' run of the place. So listen."

There was a pause and a click, which Samson identified as the sound of Harlow's teeth gripping his ever-present pipe. Then, "Here's the call I got from Jackson, the Kenilworth deputy. That was three days ago. I don't think there's anything in it that I missed, but I'll let you decide that. It came in at three-oh-five hours G. T."

A younger voice said excitedly, "Jackson, Kenilworth IV, calling Harlow, Slice 103 H. Q. Urgent. Harlow, hold onto your hair. *The Kassids are back.* Over to you."

Harlow's recorded voice, sounding sleepy, answered: "Better hold onto yours. Who are the Kassids, and what if they're back? I didn't even know they were gone. Over."

"Who are the Kassids! Just the big medicine men of Slices 42, 43, 102 and 103, is all! See your manual, page 9581 *et seq.* They landed on KenilFour ten days ago; I just got the message. It seems the local boys told them about me as soon as they got past the language difficulty, and they're anxious to meet me. I'm going over there now—call you back in about six hours. Over."

"Give them a big, juicy kiss for me," said Harlow. "Clearing."

His voice began again immediately: "You can look up the Kassids in the manual; I had to. They're a legend, a group of legends, fifteen thousand years old. At that point, my opinion was either that a gang of backwoods Messiahs were passing themselves off as 'Kassids' in hopes of gain and glory, or else that some of Jackson's charges were playing a big fat joke on him. So I rolled over and went back to sleep. The only thing is, Jackson never called back."

"I waited twenty-four hours and then alerted you. It still didn't look big. Jackson might have crash-landed some-

where and broken his leg. Or he might have got hold of some local antiquities and forgotten to eat, sleep, breathe or say his prayers. Nothing else happened until several hours ago. Then this came in, from an experimental organics outfit on Loblich VII."

THE Samsons listened to a high, exasperated voice complaining that a maniac named Jackson had landed at the station, 'preached a kind of a sermon,' and taken off again with seventeen of the group's twenty-two members. The group was now hopelessly undermanned; eight years' work would be ruined unless H. Q. sent them trained replacements sooner than immediately.

Harlow demanded more information. What had Jackson's 'sermon' consisted of, exactly?

"He talked about Love," said the organics man irritably. "And Peace—and a Message for the Universe. Stuff like that. If you ask me, the man's insane. And if you want to know why three-quarters of this outfit dumped their work and walked out with him, don't ask me. When do we get those replacements?"

There was another pause, punctuated by the click of pipestem against teeth. "Now that," said Harlow, "began to seem a little smelly. If you'll look at the tank, you'll see that Loblich is the nearest human settlement to Kenilworth, and it's a long jump—Jackson must have blasted at maximum to get there in two and a half days. But from Loblich to any of three well-settled systems is just a hop."

"So I got the signal pattern of Jackson's ship out of the files and had a warning broadcast to all the patrol centers in 103 and adjoining Slices. I also started a call going out to Jackson at twenty-minute intervals. He didn't answer it. That was all, until fifteen minutes ago."

"Jackson turned up in a landing orbit around Xavier III. The local patrol put a beam on him and warned him not to land. But instead of shunting into a

parking orbit and waiting for instructions, as he was told, Jackson headed for open space under full drive.

"The patrol burned him out of the sky. There was nothing left to pick up."

This time the pause was longer. "If he had landed," Harlow's tired voice said finally, "and if he'd got anything like the same percentage of response in a larger group, this thing would already be too big to stop. I tell myself that." The Samsons could hear his teeth grating against the pipestem. "All right, that's all I can give you," he said after a moment. "Land on KenilFour, get in touch with these Kassids, talk to them and find out what this is all about and how they do it. I've got two cruisers and a battleship on the way from the naval station in Kleinmuller, and if it turns out that they'll do any good, they'll be there in fifteen days. But we've got to have more information. And just incidentally, don't let them sell you whatever they sold Jackson. If you do. I can't offer you any guarantee you won't end up the way he did." There was a thump, and then a gargling noise that meant Harlow was sucking on an empty pipe. "Take every precaution you can think of," he finished. "Keep in continuous touch after you land. Over."

"Check, Papa," said Samson. "Clearing."

Samson, who was tall, beefy and blond, looked at Midge, dark and apparently fragile, who was curled into a very small ball among the cushions on the other side of the room. "Did you know Jackson?" he asked.

She nodded soberly. "A very good boy," she said.

"M-hm. You got that manual?"

"Here." She put the cube into the reader set into the table in front of her, and began scanning for page 9581. Samson walked over and sat beside her.

There was a good deal about the Kassids, also known as the Akassa, the Ksits, the Karsis, the Krassit, the Karss and the Krathis. All the older races in this section of the galaxy had legends about them. It was not particularly sur-

prising that Harlow had had to look them up; they were just one item among the tangled mass of folk-legend and myth that had been gleaned from a thousand inhabited worlds.

NOBODY, said the manual, knew whether the Kassids had been a historic culture or a widespread myth. They were magicians, or demigods, or, as Jackson had put it, big medicine men; they were purer and nobler than anybody else, they knew more about everything, they could change their shapes at will, et cetera. The fact that more than five hundred planets had the same or similar legends proved nothing, because all the races in question, dull as they were, had had limited interstellar travel millenia before the arrival of Man. Most of the legends agreed that the Kassids had gone away, amid weeping and wailing from the lesser tribes, some fifteen thousand years ago.

But now they were back—and something they had done to Jackson had made him leave his post, and caused seventeen other people to leave theirs, and had got them all killed.

"I won't say I like it much," Midge said. "How are you fixed for ideas?"

"Information first," said Samson didactically; "ideas after." He added, not to Midge, "Take a message."

The light-tube glowed pink.

"Charles Samson to Head Librarian, Lubyanka Central Archives. Urgent. Request all available material on the Kassids, K-A-S-S-I-D-S. Don't digest it—put it straight through on facsimile. Over to you."

He clipped a fresh cube into the receiver in the center of the room. After twenty minutes, a female voice said, "Information coming through. Over." The recording light glowed; Samson turned on the reader and glanced at the page of type that appeared on the screen. "I read you. Thanks. Clearing."

"Coffee, chef," said Midge resignedly. "And two ham sandwiches." She came over and sat beside Samson. "Hold that page till I finish it."

Samson was a man with an open mind, a faculty which served him well in dealing with the weird and wild inhabitants of many planets in Slice 103, but which, it occurred to him, was not just the thing wanted for the task in hand. He kept his misgivings to himself, however, and aided by numerous steaming pots of coffee served up by the ship's autochef, bored his way determinedly through the twenty tubes of surmise, conjecture and hearsay provided by Lubyanka Archives. Midge, who had a female-superiority complex, sat and took it alongside him, cube for cube.

WHEN they had finished, as Midge took the trouble to remind him, they had learned next to nothing that wasn't in the Slice 103 manual. "A total loss, wasn't it?" she demanded.

"Sure. Just a precaution; there *might* have been something in there that the manual skipped. If it doesn't rain one Sunday, do you give up wearing waterproofs?"

Midge's expression indicated what the question deserved no answer. "You've had your information—*now* have you got any ideas?"

"Well," said Samson reflectively, "Harlow seems to think there's some kind of compulsion involved, maybe hypnotic. I don't see how we can exclude the possibility, even though that kind of contact between alien minds is supposed to be impossible. But I've got a hunch that's not it. I think maybe they simply talked to Jackson—they *convinced* him—and he did the same to the seventeen that followed him."

"In my own fumbling way," said Midge, "I got that far three hours ago. Because if it was compulsion of any kind, why did it only work on seventeen out of twenty-two? I even made a stab at answering another little technical question—why didn't Jackson use the communicator?"

"That's easy enough," said Samson. "If you got a call from somebody you didn't know, and he started spouting pseudo-religious propaganda at you,

would you listen quietly until he was finished, or would you cut him off and complain to the Privacy Commission? And if he'd called anybody who knew him—you or Harlow, for example—we would have smelled something. Jackson might have found himself cut off before he ever left Kenilworth, if he'd tried that. He couldn't take the chance."

"But if you don't mind," Midge said coolly, "what I meant by my question was, have you got any ideas about what we're going to do?"

"Sure. I'll go in there doped to the eyebrows. I'll use—"

"Wait," said Midge. "Please. You said, 'I'll go in?'"

"That's right. I go in; you stay in the ship and watch. You also listen, but through a whisper mike—you'll hear everything I say but not what the other fellow says. In other words, I go over the cliff, you hold my legs. Catch on?"

Midge said nothing.

"As I was saying, I'll use antihypnotics, and you might as well give me a good dose of countersuggestion, too, but those are just playing it safe. What I'm counting on to do the stunt is *arnophrene*."

"Arnophrene!" Midge stared at him.

"Sure. In heavy dosage, the stuff inhibits your ability to add two and two. You can follow an argument, in pieces, and even make reasonably intelligent replies, but you can't hang onto it long enough to put it all together. In other words, if they convince me of anything, it'll be on the order of 'Your nose is on the front of your face' . . . I'll be sick as a dog afterwards, of course, and I may not remember much of what they feed me. But you can hold my head, and drag the information out of me under hypno if you have to. Remember to be careful what you ask for, in that case—we want to know who these people are and what they're up to, not what they think about the Great Spirit."

Midge kept looking at him somberly. "I don't like it," she said.

"I don't like it either. Neither will Harlow, if he has to get me burned

down for trying to save souls. . . although, come to think of it, I can think of ways to play it smarter than Jackson did. Make a phony report, duck out somewhere along the line between here and H. Q., and then find me a nice uninhabited planet to hide on for a while. Pirate another ship later, maybe; wear a false beard." He sighed. "But, come to think of it again, I guess all that has occurred to Harlow, too."

He looked at Midge. "What'll you do if I should get sold before you can yank me out of there?"

Her eyes were steadier than her husband's. "Follow you down and buy myself a tambourine," she said. "What did you think?"

MIDGE'S small hands were painfully tight on the edge of the control panel. On the screen before her, reproduced with excellent fidelity in spite of the transmitter's peanut size, appeared whatever Samson was seeing: at the moment, the interior of a bronze-green room and two of the roly-poly, stumpy-legged tentacled autochthons of Kenilworth IV. She could see Samson's hands, whenever he happened to raise them; she could not see his face.

On a smaller screen to the left was a view from a pickup in the ship's hull—a grassy plain, seen from above, with a huge, black, lozenge-shaped spaceship and a cluster of the little KenilFour air-cars.

Samson's voice remarked, "They say the Kassid is coming now."

Midge wanted to say something encouraging and affectionate, but her voice stuck in her throat.

After a moment, a doorway dilated at the end of the pictured room and something hopped in. For the benefit of the listening Harlow at H. Q., Midge began to describe it. "About a meter and a half tall—must be an oxygen breather, I can't see any mask—it's a uniped. Moves partly by hopping, partly by contracting its foot. Rather thick trunk and four limbs besides the foot, two at the very top, two where the trunk joins the

leg. A lot of flabby fingers, can't tell how many. Three eyes in a horizontal line, vertical mouth under them. No clothes. Whole thing a dull tan color, with dark pa—"

She broke off, as Samson began to speak. He was evidently replying to the Kassid's speech of welcome. "I'm very happy to be here. My people have heard great things of you from your pupil, David Jackson."

Another long pause, during which Midge said, "Dark patches, apparently at random—no pattern. I would guess the thing to be recently evolved from an undersea stage, tail altered to a foot. Don't know whether there are any exterior organs on the other side—there, it turned around for a minute. No organs. Now the KenilFours are leaving. . . ."

Samson said, "That's why I came."

Another pause, and then, "Yes, thank you." Something that ran on a great many thin, twinkling legs brought in a low stool and ran out again. The interview went on, a meaningless sequence of short questions and comments by Samson, each followed by a long silence. "Yes, of course, that's true." . . . "I see" . . . "How clear that is now" . . . "But in the case of war," . . . After a while, Samson's speech began to grow a little thick. He stumbled over occasional words, but always recovered.

After a long time, Samson said, "The word will be spread. My government will want to know about your needs and your history, so that we can receive you properly. Will you show me through your ship, and tell me something about yourselves?" The view turned toward the doorway, approached it and went through into a long corridor.

Midge closed the sending circuit between herself and Samson. "Charlie, are you all right?" she whispered. If he was acting, she told herself miserably, it was a magnificent performance. Under the fuzziness of his speech was something else . . . an awe, a quiet joy.

"All right, Midge," said Samson's voice quietly, naturally. "Don't worry."

A long succession of rooms: control chamber, power plant, a garden with plants unlike any that Midge had seen before, star charts, transparent tanks full of murky fluid . . . Samson's hand, and a narrow strip of something being put into it. Patterns of dots on the strip. Samson's voice: "What does it mean?" Then more corridors, more rooms. Finally Samson's voice again, weak and hollow. "Feeling rocky, Midge. Coming out."

IT WAS Harlow's voice asking, "How is he now?" The "now" was an irony, since even at second-order speeds, his voice had taken fourteen minutes to reach them, and he would not hear the answer for another fourteen.

Samson, in orange pajamas, very pale, said, "Ready to talk, Papa." He looked at the ceiling. "Don't think I need the hypno. I can remember most of it. Fuzzy—a dreamlike quality to it—but I think it's almost all there."

"I've already had you under hypno," said Midge quietly. "As soon as I got you inside."

Samson turned his head to look at her. "So? What for?"

"I wanted to find out if you'd had your soul saved."

Samson grinned weakly. "Is it likely? Harlow—get this. The Kassids aren't invaders in the usual meaning of the term. They haven't got any mind-rays or insidious hypnotic powers, and they aren't interested in taking over anybody's property. That's the first thing. Second, they're not a race and they're not an empire. I saw at least twenty different life-forms aboard their ship, and I learned enough to know that they were all Kassids. That would seem to account for that business in the legends about their being able to change forms. The local lads thought the same thing about us at first, remember, on account of our having two sexes. Over to you."

"An interesting conundrum," Harlow commented, fourteen minutes later. "They're neither a race nor an empire. What are they? Over."

"They're an idea," said Samson grimly. "The idea is a pretty complex one, and I don't think I got all of it, luckily. The effect of that arnophrene, at a guess, was to drop my I. Q. about forty or fifty points. But I can tell you what it is: it's a completely convincing argument—on the emotional *and* logical levels—why you should never break the peace or stop loving your neighbor. If you're thinking that you've heard arguments like that before, and we're still the same old robbing, raping and fire-setting crew, you're wrong. *You haven't heard this one.* I'm telling you that I only got the fringe of it, and it made me want to bawl. Once you've heard it—if you've got the intellect to take it completely—you'll never forget it for a minute, and you won't find any loopholes. You won't backslide, and you won't be a Sunday believer. You'd sooner cut your throat."

"Over," added Midge quietly.

Samson smiled at her and waited for Harlow's reply.

"I guess I believe you," said Harlow's voice when the time was up, "but it would be hard to swallow if it hadn't been for Jackson. I want to ask you two things. First, is there any question in your mind about what would happen to homo sap if this state of mind spread? Second, what do you think we can do about it? Over."

"One," said Samson promptly, "no. Once you've heard the Word, and understood it, you *know* there isn't anything more important than spreading it to other people. We would become Kassids—meaning that the Word would come before everything else—meaning in turn that we'd stop being the masterful mayflies who boss this half of the galaxy. We might not even stay where we are. In fact, there would be a lot of changes, some big, some small, but they would all add up to this: the human race as we know it would cease to exist . . . and we can't have that, can we? The universe may belong to the angels, but we're men. You can believe that I'm not telling you this just to put your mind at rest about Jackson. We've

never had any serious opposition in the six hundred years we've been spreading out, but this is it. These are the kids that can finish us with one hand tied behind their backs."

He paused. "It occurred to me a long time ago, when I was a student, that if anything ever did fold us up, it wouldn't be a gang of monsters breathing pure fluorine and squirting death rays from every tentacle, it would be an idea. You can kill monsters, but you can't kill an idea. From Genghis Khan to Hitler, not one of the real conquerors—the guys who just wanted to grab everything in sight—hung onto a-half-credit's worth of what they got. But the Roman Empire was an idea; so was Islam, Christendom, Communism and Anticentrism.

"Two, I don't know what we can do about it. I'll tell you some things we can't do. We can't make war on the Kassids. If we did, everything we've got in this Slice, from shipyards to outhouses, would be buried under crowds of howling neuters in about two seconds. I don't think we can quarantine them, or ourselves, forever. There isn't anything they want in the universe, except to spread the Word, so I don't see how we could make any kind of a deal with them."

HE TOOK a deep breath. "Let me tell you what else I found out, and maybe something will occur to you. I said before that the idea is complicated. That's why ethics go up with intelligence, maybe. And that's why the races we've met, that remember the Kassids, aren't Kassids themselves. They're not bright enough. That explains something that's had us wondering for the last six centuries—why there isn't a single race in our part of the galaxy that rates higher than a fairly bright twelve-year-old on our scale. There isn't any correlation between sexual reproduction and intelligence, as my wife and some others would have you believe. It's simply that the others grasped the idea—became Kassids. Eventually the Kassids had done all the proselytizing they could. That

was roughly fifteen thousand years ago. Either they missed us altogether, or we weren't much better than an ape's cousin at that stage; otherwise they made a clean sweep of the galaxy. Do you know what happened then? Do you know where they went?" He paused for breath again. "They went to the nearer Magellanic Cloud, and that's where they've been all this time. Some of the forms I saw are from there. The same thing happened—eventually they absorbed all the intelligence there was. So they came back, hoping some had grown in this galaxy—and they found us." He sighed. "Over."

Harlow's voice came back. "Sounds stinking. Anything else?"

"One more thing," Samson told him. "This slip of plastic they handed me as a souvenir. They gave me a verbal translation, and I remember it word for word. It's a dictionary entry: '*Man, noun. A pentagonal, dipolar, monoplane dominant of intelligence 96*'—that's on their scale with the average Kassid race at 100—'*native of District so-and-so.*' The significance of it, from their point of view, is the '96.' It's the first time they've been able to make an entry over 75 in the last twelve or fourteen hundred years."

He frowned. "When I first got back and Midge neutralized the drugs, I thought of it, and it seemed to me there might be an answer there. A definition describes the observer as well as the thing observed. That seemed like a brilliant thought to me at the time, but I can't see any help in it now." He blinked unhappily. "All it seems to say is that they've got a superficial and oversimplified system of classification, meaning that physical structure isn't important to them—which we know already . . . my guess would be, incidentally, that the one who talked to me was picked because the Kassids thought I'd feel at home with it. It had five extremities, although none of them was a head; it had a top and bottom and it faced in one direction. Ergo, it looked just like a man. Over."

Midge said thoughtfully, "It's funny.



If they were so geometrical about it, why didn't they say bisexual?"

Samson chortled. "You *would*—" he began, and stopped abruptly, with a stricken expression. "Wait a minute," he said. "Cancel the over. Everybody shut up, even you, Harlow. The Midget has said something."

Midge seemed to be trying to look indignant, pleased in spite of herself.

"Harlow, Midge," said Samson slowly after a time, "there's one other thing about life in this universe that's been puzzling us for the last six centuries. We know now that it has nothing to do with the intelligence level, but we still don't know why everybody else but us reproduces by simple division, budding, spores or conjugation—and in consequence, lives a damn sight longer than we do, almost long enough to make up for their low native intelligence. But just suppose that Earth really is a freak planet—suppose that even the Kassids have never run into a bisexual organism before. I didn't mention it to them, and I'm willing to bet Jackson didn't either. You know how tough it is to explain to a xeno—it generally takes ten days to convince them you're not kidding. And, Harlow—suppose that I go down there again, and take Midge along. . . ."

**W**HEN they re-entered the ship, Harlow's voice was saying, "Are you there, Charles and Midge? Speak up, dammit. Over."

The Samsons looked at each other, glassy-eyed. "With you in a minute, Harlow," Samson croaked, and lurched after Midge into the sick bay. Both of them were full of arnophrene—Samson's second dose within two hours, and an extra-heavy one for Midge.

They staggered into the living chamber again, some time later, and collapsed on opposite sides of the couch.

"Never again," said Midge faintly.

Samson wet his lips. "It worked, Papa. They swallowed it. I gave Midge enough of the stuff to make her about twice as disconnected as usual. I walked in with a long face and told them that

the change had started in my absence. They wanted to know what change. I pointed to Midge, and we stripped for them. They may not be interested in shapes, but there was enough difference there to make them take notice. They called a conference, and probed and poked and x-rayed us. I told them the story of the caterpillar and the butterfly. Or the nymph and the waterbug, I should say. You're the ugliest and dumbest member of this family, Midge."

Midge made an inarticulate sound.

"I told them we're a two-stage organism," Samson said. "One stage builds all the tall buildings, writes all the novels, does all the high-class thinking. The other stage reproduces. I said we have a forty-thousand-year cycle, half to each, but the first stage always tries to retard the metamorphosis, because the second stage is so stupid that it ruins our civilization every time, and we have to start from scratch. I said I was awfully sorry, but the change had come earlier than we expected this time, and there was nothing we could do about it. . . . they're going off to the great nebula in Andromeda. Maybe they'll find sixteen quintillion brainy races there, and they'll never come back. The other way, at least we've got twenty thousand years to think up another gag."

He sighed. "All right, Papa, Over."

Fourteen slow minutes went by. Samson and his wife looked at each other and said nothing.

The Kassids had tried converting Midge, to see if she were as moronic as described. Midge had reacted properly, being so befuddled that she could hardly work her way through a sentence; but she had heard a faint echo of the Word.

Harlow said, "I don't know what to say to you, kids. You'll be remembered for this, both of you. A long time. History's been a dull subject for the last few centuries, but this will liven it up. I don't think anybody will hesitate to call it a major victory. Over."

Samson smiled, bitterly and sadly.

"That depends," he said, "on how you define 'victory'."

• • •

# THE ETHER VIBRATES

(Continued from page 6)

I think we've been kidding ourselves in another way, too. A few of the old masters of science fiction have known astatine from holmium, but an awful lot of our revered science has been strictly pseudo. When an author can take a complex theory like General Semantics and complicate it even more—to the point where a man can be in two places at once—the average reader is apt to conclude that he can be in two places at the same time and will settle for a point about six feet in front of his television screen. And he won't give a damn that some other author predicted he'd be able to do that as long ago as 1911.

So let's throw the science out and start from scratch. How much science does the author need to know? I'd say about the same amount that's required by the author of a love story, a mystery story, or a Western. His description of the Terra-Rigel III space liner doesn't need to be, and *shouldn't be*, any more complete than the description of the Pan American Clipper which leaves LaGuardia Field tomorrow morning. While the members of the Medium-Sized Monsters Fan Club of Quack-enbush, New Jersey, may breathe a little faster on learning the secret of overcoming the Fitzgerald-Lorentz Contraction theory, the average reader doesn't give a damn. In fact, it's a pretty good bet that it's just this which is keeping average readers away in droves.

Don't get me wrong: I love fans, especially those who write in demanding more Crossen; but we're talking about how science fiction authors can get bigger checks and reach larger audiences and, incidentally, how science fiction publishers can make more money. The fans represent 95% of the noise and 5% of the buying public today.

So let's toss the science overboard, retaining only the small amount that's necessary. Then we'll have room for characterization, for ideas, for atmosphere—for all those things which can strike a responsive chord in the readers' hopes and desires. Readers who are interested in predictions can read the science journals or consult the nearest tea-leaf reader. In the meantime, we can restore science fiction

to the creative state it enjoyed in the pre-Gernsback era—and maybe readers will flock to it as they did then.

## 2. Say something.

This is my second rule, not a command to those fans who are already reaching for typewriter and paper. P. Schuyler Miller recently wrote that "science fiction is moved by the same forces, answers to the same stimuli, and interprets the same ideas with which our society is most concerned. Stylized and restricted as it may be, it is a part of the main-stream of our times." He's right, but you'd hardly guess it from reading the majority of today's science fiction.

Both as a writer and a reader, I am heartily sick of all the contemporary balderdash about writing for "entertainment." Any writer who writes fiction is striving to entertain his audience; he is also offering the reader the "benefit" of his own observations. In the case of the writer who insists that he has nothing to say, that he is merely putting on an amusing little act in hope that someone will toss a copper, the observations are still there, but he is refusing to take the responsibility for them. We have enough of such writers. But we need more writers who will make more conscious observations, while they are also being creative and entertaining.

Science fiction is, perhaps, suffering from the same anemic condition as other literary forms. The majority of the authors strive to be objective in the mistaken belief of our times that this is admirable. Ethical corruption, political tyranny and social distortions (whether in the future or today) are all reported in the dispassionate mood of calm acceptance. Thus the writer who rationalizes his position as being objective has, whether he wanted to or not, taken a positive stand in favor of accepting the situation. And his protestations of objectivity are the highest sort of dishonesty.

Science fiction—in fact, all literature—might well profit, as it has in the past, by having more subjective men, more angry men, take a hand in its creation. Should this be done I think we will have far more entertaining literature. The reader may

laugh at satire, but it is produced only by angry men.

There are many examples on both sides of the ledger, but I prefer to give most of my examples by omission. I might, however, point out that two of the finest (if not *the* finest) writers in science fiction today—not only by my own standards, but by those of the majority of the professional critics over the country—are Ray Bradbury and Ward Moore. I doubt if either of them will mind if I report that they know little about science. And certainly no one could ever accuse either of them of being objective—of being anything but “angry men.”

In closing, I'd like to quote from my introduction to my new science fiction anthology, *Future Tense*: “It seems to me that science fiction today offers a great challenge to writers. If they meet the challenge even halfway, then science fiction, and literature, will become rich in the names of authors who have spoken for the public conscience; if not, science fiction may well sink back into the doldrums until that day in the future when some aspiring president, leader, or commissar proves that he is unassuming and mediocre, just one of the boys, by claiming he reads science fiction.”

—Kendell Foster Crossen

## ETHERGRAMS

**H**ERE it is again; laughs, tears, jokes, pathos, sentiment, villains, heroes, gals, mothers, BEMS—the gr-r-r-eatest show on earth! And all yours.

### ECSTATIC INTERLUDE

by Thelma White

Dear Sir: This note is written mostly to thank you for appropriate comments after each of the letters in TEV. They (your comments) affect me like scratching a place that itches—especially the answer to Bob Fultz' letter in the October issue. Who says you don't have humor?

As for your stories—I can't put the magazine down until every story is finished, but some leave odd tastes in my mouth. For instance ASYLUM EARTH. It left me so indignant at the loss of human dignity that I'd like to scratch Bruce Elliott's eyes out.

My main complaint is that it is so long between issues. The magazine can be read in about 4 hours (including TEV and the editorials) and then what is there to do until the next issue is out? (Yipe!—Ed.)

I wish someone would invent a story or something that would last awhile. By the time the next month's magazine is on the stands I'll know where every comma is without looking. Oh, well, I suppose you can't help that but maybe you'll have longer stories? Also must we be so modern that stories can't have happy endings? Four out of the six stories in the October STARTLING ended unhappily. Why?—317 Richardson, Sausalito, Cal.

Bruce Elliott walked in just as we were fitting your missive into the column and we gave him a look at your suppressed desire to interfere with his vision. With his 20/400 vision, he said, he wouldn't be missing much, but he hates himself for getting your fur up.

So we affect you like scratching a place that itches? Ah, deft compliment indeed—what could be more ecstatic?

Until you mentioned it we never even noticed that four out of the six stories in the October SS had unhappy endings. Apparently our subconscious has never considered it of importance equal to the merit of a story. Of course, given two stories of equal quality we'd pick the one with the happy ending, but we wouldn't distort a good story just to get a happy ending. Would you?

### PROJECT GIGGLE

by Bill Deppe

Dear Sam: Saw your picture and the plug TWS and SS got in the September ish of THE AMERICAN NEWS TRADE JOURNAL. You are getting into fine company; movie stars yet. Is Robert Cummings really anxious to work in a STF film? Since he is so good on comedy why not one of deCamp's satirical stories?

A question: Why is it that artists who illustrate the stories always pick the incident of least importance to make a drawing? For example, the pic on page 17 of Nov. SS, which was with THE STAR DICE. It had no bearing on the story's plot. Oh well, maybe the artist likes little men. Incidentally where did the idea for the lead illo come from? Wasn't a single nude in the story. Not that I don't like nudes but just didn't fit.

While on the subject of girls, why doesn't someone put out a book or folio called THE NUDE IN SCIENCE FICTION & FANTASY ART. That I would buy. Say 'bout 8 x 10 to frame.

Here is another project for you boys. Some anthologies of stories that have a funny side. The title could be HUMOROUS STORIES OF SCIENCE FICTION AND FANTASY. In fact a mag of this type would go over big. I for one never get enough good laughs in my STF. What do you other fans think? Let's have some comments on this. Come on ed, get on the ball and take the hint. Look at the response you got to Major Venture.

Since I am so wound up I might as well ask for something else. What about some stories on JAZZ? I have been collecting JAZZ and STF since 1940 and have yet to see a good combination of both. They are an awful lot alike and a story with a JAZZ plot would be 'gone.'

By the way, do you or any fan know where I can get a copy of the first issue of STARTLING? I collect first issues and need a good copy. Write me at once if you want to sell or trade.

So long, keep the plots HOT.—12 South 6th Street, Wilmington, N. Car.

P.S. Would love to see a special Captain Future mag. When?

We've had some stories in which jazz figured more or less prominently—DEVILS FROM DARKONIA, NO DIPSY FOR DEX—hope you have those in your collection. Will pass your request on to Larry Clinton.

Have myself thought that somebody might do an anthology of humorous science fiction stories, but the idea has certain drawbacks. Too specialized a collection might not appeal to enough people. Better to get variety into an anthology and include several humorous stories, methinks. As for nudes—don't start those wolves howling again.

This Bob Cummings is a very nice guy—intelligent, articulate, good story-teller, interested in everything. And very obliging and cooperative. Haven't heard of any plans to do a stf movie for him, but Bob Hope and Bing Crosby are going to do one called "Road To The Moon," I unnastrand.

Come to think of it, somebody is doing an anthology of humorous stf—Fred Brown and Mack Reynolds, if I recall keerect. And we'll bet it'll be good; with those two at the helm.

## FOUR O'CLOCK IN THA MO-O-ORNIN'

by Arda Kauer (or Kaner . . . such handwriting!)

Dear Sam: It is 4:00 in the morning, and

I have been reading your mag, SS, for the past two hours. Maybe that will explain the handwriting (I'm writing this in bed) and the lack of proper style.

I think this is the 1st letter I've written to you, although for a long time I have enjoyed the battles in the letter section. By the way, I'll have a word to say about one of them later.

About the stories in that last issue—all worth reading. Laughed myself sick about "The Guided Man." Get more of Mr. Elliott—or Mr. X, in case he is a pseudonym. This "Asylum Earth" was—well, I won't attempt to describe it. Cover—good.

What I enjoyed most, though, was your "A Life in the Day of an Editor" (title as mixed up as the rest of it!). Gooooood night. If that is the way it goes, I'd rather be in H(shh) well, Hades, than in the editor's chair. Gracious! "There's a fan outside to see you..."!!!

Now—the letters:

Fletcher Holding—applause. One of the most sensible people I have known (?) though it is only through a letter.

Jim Leake—Partly you're right, partly not. Just as long as sex is kept inside the story, I won't open my mouth for a murmur. But covers are another thing. Can't the artists paint a lady well without having her half dressed? And point no. 2: if they draw a half (un)dressed gal, and if they do it *really well*, let them send it to an art exhibition, and I might even cheerfully vote them the 1st prize. But *on the cover*? Look, my lord and master, there are some wonderful people who consider all science fiction trash because of a few lousy covers they have seen. Otherwise, I have nothing but applause for you.

As for Mr. Seibel, I have seen letters from him and about him. Tell him to cut his nails, trim his sails, and for Heaven's sakes quit ruining and abusing the King's (pardon me, Queen's) English. *Something* he makes sense, though.

Now, if you think this is nothing for 4:00 o'clock in the morning, try it some time.—3307 Portland Avenue, Minneapolis, Minnesota.

We did once . . . too much like work.

What's all this about half-nekkid women on the covers? If the artists do it *really well*, let 'em send their masterpieces to an art exhibition, and not stick the things on our covers? Then you say some nice people think stf is junk because of a few lousy covers they've seen. Question: are our covers masterpieces that shouldn't oughta be there anyway, despite their magnificence, or just stinkers that shouldn't be noplac? Write and let us know.

As for people who judge a magazine, or an entire literature, by a few busy covers

they may have seen—well, that's their problem, as Bixby would say.

Seibel makes sense? Ever?

## A BARREL OF EGOBOO

by Kay Thompson

Dear Sam: Pardum me, Sam, while I try to find something in the November editorial to argue about . . .

Your editorials begin to sound like those in AS and FA—you sure you're not really Howard Browne?

Peter Poulton does a passable job thish of imitating Finaly's style in his (Poulton's) illos for "The Star Dice."

I have just two short words to say about "The Crook in Time"—screwily wacky!

Ah, I see you have, or, that is, Jerry Bixby has, a review of Brevize in this ish's "Current Fan Pubs." You may be surprised to know that Brevi has improved 400.69½% with issue no. 3 . . . new cover change, thicker.

*I am mentioned at the end of the Ethergrams column!!!* Egoboo follows, by the barrelsful, muchly.

I have just thought a thought—why don't you get one of your better artists to do a series of back covers, illustrating one of your monthly novelets, other than the lead novel, which is illoed on the front cover, anyway. I think it would spruce up the mag real nice!

Speaking of covers, I see you have the guy who's been monopolizing the FA and AS covers this last year. (Admit it, W. Popp; in FA, all the covers from June '52 to date have been by you!) Now, I don't mean that Popp isn't a good artist, because he is; but too much of one thing is enough! Keep the variety on the front cover, Sam!

Through careful and thorough perusing of the Ethergrams this month, I gathered that the general reaction to "The Lovers" was: "Goshgeewhizoboyoboyoboyoboy!" (Well, it was good.)—410 South 4th, Norfolk, Nebraska.

P.S. Where can I get one of those electric fans you mention in your Noveditorial? Might help the s-f situation around Norfolk!

What're you going to do with those barrelsful of egoboo? . . . start a store? Guess everybody could use a little. I'll take two pounds, myself.

Got a lunch date with Browne tomorrow; will tell you next ish whether we're him or not. We doubt it, though—he wears shoes.

Saw that electric fan at Altman's in New York—don't remember the manufacturer, but the inventor was the one who invented the all-glass drip coffee maker, the Chemex. That help?

## MAGS FOR OVERSEAS

by Carol McKinney

Dear SM: Just to be different I'm not going to rave about the stories this time in the Nov. ish, mainly because they're nothing to rave about. The only one that was even fairly good was PROPOSAL by de Camp. The lead novel THE STAR DICE was disappointing. The rest are unmentionable, especially THE CROOK IN TIME (gaaaa . . .).

Looking through various back issues of s.f. mags the other day I was surprised to see the number of letters from foreign countries begging, even pleading for some stf.—anything at all would do. Now, how many fen just sit around guarding their hoards of mags, carefully brushing off each speck of dust and savagely chasing each innocent and unsuspecting fly who dares to approach their treasures? Or how many just stack their mags in boxes in the attic to mold away, using a flimsy excuse that maybe someday there won't be anymore sf available and then they can read them over again? (IF that time ever comes they'll be too busy to read them anyway.)

Perhaps there are a few fen who send mags to other countries, and they undoubtedly feel the way I do about it—that everyone who can should send a few along to alleviate the sf shortage in other countries. It doesn't cost a fortune, as some may think, for postage either. Costs less than a dollar to send 10 mags the size of SS. If you mark the package as containing magazines it costs even less, and you won't have to bother making out a customs declaration, either.

Anyone who wishes to trade sf mags by mail drop me a line, and don't forget—America has the best in sf mags; spread them around so the rest of the world can enjoy them, too!—385 North 8th East St., Provo, Utah.

After that scurrilous first paragraph, I oughta send your letter back unopened . . . but you liked PROPOSAL, so you're forgiven. I like *your* proposal, too—about sending mags abroad, that is.

## WE'RE GLAD TOO

by John Brunner

Dear Sam: Late as usual, I have just finished reading Philip José Farmer's story, THE LOVERS, in the August issue of SS. Anent my previous disheartened comments on the Hamilton horror in the August TWS (which I have still not found courage to wade into), I have just asked myself, without getting a reply: How is it possible for two companion magazines to be so discrepantly filled in the same month?

Don't, please, take that as a rave on the

story. My attitude towards it is a lot more complicated than that.

Basically, I guess, the letters you will receive or have received about this story can be divided into two groups—I think we can discount those who howl that this novel describes a bestial union—that it puts into words facets of love-making which everybody knows about which nobody should be allowed to mention—**BAN SS FROM THE UNITED STATES MAILS!** (You can almost hear their nasty little minds ticking as the tumblers fall into place on the dialing of the combination of a mature and sensitive outlook on life with considerable competence as a writer). These two groups—well, it was Dean Inge who said, and Rex Harris quoted it in his neat little book on jazz, that there are two kinds of fool: those who say, "This is old and therefore good," and others who say, "This is new and therefore better."

The former probably state in essence, "We never read a story like it before, which means it can't be any good," and the latter, "We never read a story like it before, which means it must be a classic." Isn't that so?

Myself, I don't think anyone, at this stage of the development of science fiction, could properly estimate the ultimate value of **THE LOVERS**. Farmer is one of the most pleasing new writers I have ever met, though like many authors his style is strongly derivative—for instance, his wogs, though charming, might have walked straight out of one of Crossen's ham-handed efforts at humor—but Bradbury was writing a hash of fan-slang and ill-digested Poe when he first put pen to paper—and for my money, in consequence, ten years from now Farmer's stuff will be sounder than Bradbury's today. He is blessed with a more fortunate and—dare I say it?—more mature foundation for his later work.

But, as I said above, the consequences of this work may not appear for ten years. I do not personally consider it a classic, or even very good. But it is literally speaking as far above the average mutton-headed attempts at handling the human-non human relationships of tomorrow as Eliot above the would-be intellectual who has obscurantist verse published in a black magazine in white ink.

Perhaps I could put it this way. The other day I made my first sale to America—a long novelet. Not to you, but to aSF. It paid me six hundred thirty dollars. I would gladly have traded not only that, but my entire literary output to date, for the privilege of having written **THE LOVERS**.

Now are you satisfied?

My congratulations to Crossen for **THE HOUR OF THE MORTALS**—the only thing half-way to adult stf he has yet had in print. **PAGE AND PLAYER** was interesting if only because it emphasized a rapidly growing tendency in stf (see also **THE LOVERS**) to portray aliens not as inferiors to

be exploited but as superiors by whose selfless aid we may be saved from the more disastrous results of our racial foolishness. Vance's **NOISE** remains pointless after two run-throughs; and is overwritten in a manner reminiscent of C. A. Smith's appalling **SINGING FLAME**. The Frith satire was disappointing, the Ellanby tale was handled better by Leinster in **THE GADGET HAD A GHOST**, and the probability slant by Smith (G. O.) in **MEDDLER'S MOON**.

The September **SS** featured, as you may recall, a typically colorful and forgettable Vance. (Tell me, by the way, who illo'd **DRAGON'S ISLAND**?) The Dee novelet was—passable. McGregor's **PERFECT GENTLEMAN** was half-way to being a brilliant short—but half-way only.

Incidentally, ament your remarks on novels being rated over shorts: I'm afraid you're wrong and the readers are right. The day of the classic stf short is passing. No more skies full of ships. Even the novelet is getting cramped—take **THE HOUR OF THE MORTALS**. I'd have taken that to novel-length—not under thirty thousand. Sf, Sam, is busting its breeches. I'm awful glad I'm in on it, myself.—*Highlands, Woodcote, Reeding, U. K.*

In sober vein, we appreciate your comment on **THE LOVERS** . . . and your ability to say, in the same breath, that it wasn't "very good" but you would have traded your entire literary output to date for the privilege of having written it. As a matter of fact, we think you stretched your criticism a bit for effect—**THE LOVERS** was pretty good. Upon analysis, the dramatic structure of the story stands up remarkably well. Every bit of business was astonishingly effective, was designed with surprising skill. It wasn't only the originality and breadth of the theme which affected you—consciously or not, you were responding to an unusual if not extraordinary level of writing.

The letters are still coming in, incidentally—more raves and truckloads of frantic inquiries demanding to know "where can I get a copy of the issue with **THE LOVERS**?" I missed the August ish and then I saw all those raves in the November number!"

At the risk of being considered an obstinate old man, I refuse to budge from my position re: short stories and novels. The day of the classic short has far from passed; it is only beginning. I refer you to **ALL THE TIME IN THE WORLD** by Arthur Clarke, to **THE PERFECT GENTLEMAN** by R. J. McGregor, to



WHAT'S IT LIKE OUT HERE by Edmond Hamilton and NO LAND OF NOD by Sherwood Springer in TWS. Admittedly it is a much more severe task to create something imperishable in a few thousand words. A novel gives the author room to spread and some authors just work more easily where they have more elbow room.

## INHUMAN US

by Hank Moskowitz

Mines Dear Sam: At times I think you're a fluke of nature; also inhuman. It's not that you are twenty-one feet tall—I expect that of an editor—or any other such run-of-the-mill thing.

This, the November issue marks the twelfth issue of SS whose helm you've been at. I don't intend to run through the whole list of top stories—wait till next month. But you've pulled SS higher than all the previous editors combined. Of course one must give Sam Merwin credit for paving the way. And doubtlessly Bix has been a great help.

This letter comes to you in time to make the letter column deadline because the ball-blackening has been lifted. Since the August issue appeared in June, not one copy of the September or October issues were allowed to appear.

This new department on TV science-fiction should go places—no, not leave the mag. Your editorial was a terrific let-down after last month's. Bix is hitting on all cylinders now with ROTCSFP. And TEV . . . well, you know.

Now we know that THE LOVERS was accepted; all that remains is the prayer that the book version will not be watered for the more general public or harmed by the padding that must be made to fill a book. This well could have been a dangerous set-back to SS's progress if TL had been booted.

John R. Phillips is welcomed into our "hardy sect of conspirators, foully persecuted but still fighting."

Disintegrator hell! Hawkeye (James Fenimore Cooper, Jr.), old deerslayer. Tried and true Captain Future Fan that I am, I'd have used a proton-pistol on you. And furthermore, regardless of weapons, *I would not have missed!*

And as for you, Mines, you'll have your "most colossal counter-blow of all time" in a year or so, just as soon as I can get a month or three full-time behind a typewriter. With that hint I leave you to your nightmares.

And most likely I would've taken a shot at you, too, Craig Sutton.

In the same vein, many thanks to Jim Harmon for his excellent backing up of CF.

Future Tense—The issue in which this letter *might* appear (a subtle hint, that. Whatsa matter? You wanna be ball-blackened again?) will be another step in the series that has made SS the top stf pulp in the field. (I would have said the top stf mag—which is my opinion—but that might have started repurcussions.) Trimmed edges is something that hasn't decorated a stf pulp in two years. I am glad to see it happening again—especially since it's on SS.

Will be waiting on baited hooks for the Crossen novelet next ish—as per usual.

I'll see you around, I guess, in TWS, SpS, etc. Until then, I remain yours truly—*Three Bridges, N. J.*

To take you in order (which is a hard thing to do, the way your mental processes flit about) here goes:

You forgot to explain why we are inhuman.

Merwin deserves the accolade you offer. I'll take the bow for him. Incidentally, some peachy Merwin stories are in the offing.

Wish I knew what you are talking about with all this ball-blackening patter—couldn't make heads nor tails out of that paragraph.

THE LOVERS won't be padded for book publication. Farmer is doing a sequel tentatively titled MOTH AND RUST. The plan is to combine for a book.

You're preparing three full months behind a typewriter for me??? Nightmares, here I come.

What do you mean, SS is the top *pulp* in the field? If you see a difference in categories, explain it to me some time. Take a month off.

See you around.

## BAKSHEESH & BACOPY

by Charles F. Wells

Dear Sam: Well! Several things have happened since I writ you last. Lemme explain that last letter: I hadn't read SS for several months when I wrote that, and it came as a distinct shock to see the things you had done to it. So thass why I said whatever I said about that. Actually I like it. Secondly, I was in Atlanta, Ga. at the time I wrote that. There, *before* I bought the July SS (That was the one just before the one that had THE LOVERS in it, wasn't it?—No—I remember now that I bought the one with THE LOVERS *before* I bought the other one—I remember now—the August issue I bought in Atlanta, and then, in the railroad station I

found a bacopy July ish, and read it on the train. So I wrote you on the *August* ish. Confusing, no?)—as I said in the parentheses, that should be August ish—I was over at Ian Macauley's and I saw the July ish (do you follow me?), and it had trimmed edges. That day, or the next, I went out and bought the August ish, and, on reading it I wrote you a letter of comment wondering what ever happened to your even edges. It wasn't until much later that I learned that the Atlanta gang had a paper cutter and *all* their edges were even. And when I read the July ish afterwards, I never wrote you a letter explaining.

Phew.

Oh—whatever I said about THE LOVERS, I take back—I really think—and that then—that, to put it in the words of Henry Burwell (or *somebody* up here). "It was one of the little gems you made thru miles & miles of crud to get to." Why I didn't say that in my letter is too complicated to herein explain.\*

Now, the October ish, which is what I originally wrote this letter to comment upon, was a grave disappointment to me—it wasn't nearly as good as the preceding ishes I bought since I returned to SS. I didn't like ASYLUM EARTH at all—too much fts, too much like I REMEMBER LEMURIA! and the other Shaver Mystery stories. THE GUIDED MAN was better, but not too much so. I don't like comedy stf of the slapstick sort. Stf with comedy in it I like (like HOUSE OF MANY WORLDS) and funny fts, but *not* funny stf. Of the shorts, DISPOSAL was the best, and the only really good—and it was the funny kind—the only reason I liked it is because of the neat idea of the rings therein. (Yes I am one of those few who read stf mostly because of the scientific ideas involved! Isn't that just too terribly *too* awful? THROWBACK was fair (who is Mirriam Allen DeFord? A pen name for Kuttner?) NOTICE was too hackish as a story and the idea was bad too. GRAVESONG, needless to say, was horrible.

\*If I did say anything bad about it in my letter!

That first Finlay illo for ASYLUM EARTH was not at all like Finlay and I didn't like it. The cover was all right, but the starry background was too gaudy a purple and I NO LIKE!!!

Larry Baidowsky: I rather think Sam's funny where he should be funny. You certainly don't want him to be funny all the time!

Richard Geis: ##" & % & # / \*\*\* ( ) & ? | & X X : / " ! ? X \* \* % / ! ! ! To you!

Les Cole: What happened to Es?

B. G. Warner and Ray Capella: I didn't like to see the old format go either, but I still think this one's better. I wish it wasn't that gaudy red and yellow, though.

Martin Graetz: How do you pronounce your last name?

Diane Tenglin: Fooey on the N3F. Yes, I

said FOOEY!

Peter Frailey: NC

Vernon Hough: How d'you pronounce your last name?

Fletcher Holding: I've allus held the same thing.

Craig Sutton: You better leave Science alone and stick to commenting on SS.

Florence Tindall: Ah, another femfan.

Leonard Gleicher: Gosh, is there such a thing as a fan who *hasn't* got too much mail?

Bob Fultz: (CENSORED)

Gregg Calkins: I correspond with you, but I will say here that I only think SS is the top pulp in the field. You write a good letter tho and all the fans who don't take Oopsia dono what they're missing.

Haven't got time to comment on the rest of the letters but I will say that the best were by Jim Leake, Gregg Calkins and Jim Harmon, not that I agree with everything that was said in them.—405 East 62nd St., Savannah, Ga.

Egad, Miriam Allen de Ford is no pen name for Kuttner. She's a well known writer in the detective field, starting to edge over into science fiction. Ken Crossen has a theory that all the good detective story writers are going to wind up in science fiction anyway—remind me to tell you about it some time, if he doesn't.

Come to think of it, you must have been impressed by de Ford to think she might be Kuttner. Greater praise hath no fan. . .

## CORRECTION

by Mildred Moore

Dear Mr. Mines: You printed my request for Cap Future mags for which I thank you, but you didn't print the most important part—my request for correspondence with fans. I only have one friend who likes science fiction. He lives in Japan.

I have been reading stf for 10 months and have lost interest in most of my previous types of reading. I've tried many mags, but like the Thrilling Four and a couple of others best. No mag as yet has even matched TWS, SS and FSM in letter columns. I enjoy it as much as the stories. Some of those guys should be comedians. Aren't you going to have a letter column in your wonderful new mag, SPACE STORIES? Hope so. Also hope there will be more covers on SPS like the first.

I'm 21 and would prefer female penpals, but others are welcome to write also.—116 William St. Hightstown, N. J.

P.S. Sam, do you write? If so, let's see some of your stories.

Sorry, men, she prefers female corres-

pondents. You can try, but it sounds like an "also ran" category for you.

Haven't written any stf in years, Mildred—might at that if I ever get any spare time but am a little dubious about selling it to myself. Stick the competition with it. (Yuk.)

## GRUESOME APPROACH

by Maurice A. Lemus

Mines dear Sam: Oh, well, monkey see, monkey do. Who thought up this witty introduction, or whatever it is? I like it. I like it.

Who the heck is this Victor Juengel character? I hope his letter didn't represent his personality. If it did I pity the poor sap. If he wrote it in fun, he did a lousy job. If he wrote it seriously he did an even lousier job. As far as I'm concerned, now that you've thrown him to us, the fen, you can have him right back.

Mrs. Faulkner, I enjoyed your letter tremendously, and agreed with you all the way. I didn't catch the significance or the importance of those brats on the cover as you did though. It was stupid of me not to do so, even if I say so myself.

Do I envy Mr. Ackerman! A MINT collection of SS. I'd give my right arm, not having the money, for his collection. But I guess he wouldn't want my right arm for those SSs . . .

Say, who is Henry Moskowitz? Once upon a time (original phrase) I was unfortunate enough to meet a little, immature, unhatched BEM fan from Oakland, California. It seemed that he had a correspondence with ye olde Moskowitz. This, the correspondence, was the love of his life, along with Milton Lesser. He also told me that Henry Moskowitz was a relative of Moskowitz, the stf writer. He could be right on both counts, as far as I know. Now wait, don't get me wrong. I'm not trying to do Henry wrong. He's probably a nice guy and all that kind of stuff, I'm just writing down the impression that I got from the little BEM. I had to get this long-silenced affair off my puny two-by-four chest because the said Oakland fan left me very curious. You know the old saying: "Curiosity killed the cat, but satisfaction brought him back."

I don't have to make any comment on THE LOVERS because every good thing about it has been said.

THE STAR DICE was darn good, it was simply overshadowed by THE LOVERS.

What, if you'll be kind enough to tell me, was so funny about THE CROOK IN TIME? It was readable, but to save my life I can't find anything in it that even brings the suggestion of a smile to my gruesome features.

PROPOSAL was good, but in my opinion wasn't the best de Camp has done or will do. (I hope.)

I think that features like your CURRENT FAN PUBLICATIONS and ETHER VIBRATES should be praised and applauded. You guys are doing a swell job with them and with the rest of the material that appears in your mag. Here's more power to you.—664-4th Ave., San Francisco, 18, Cal.

P.S. This is my first parchment to your mag and I hope it won't be my last. I'm only 16 years old so I'm not too much to blame for the contents of this poor excuse for a letter.

We've got news for you. The "Mines dear Sam" salutation which you so admire was invented by your friend Henry Moskowitz. Seems as if your fate lines are inextricably interwoven.

So you're only 16? Want to make 17 . . . ?

## CUTIE AND CUTER

by Rory M. Faulkner

Dear Sam Mines: Since I can just hear you groan, "Here's that gabby old dame again," I'll take pity on you and make this one short. I want to comment on one story only in the November Startling—"THE NIGHT THE WORLD TURNED OVER." I got a big kick out of the sly humor in this one. It is a twist, this treating a cosmic disaster so lightly!

I think this one would make a swell movie—a companion piece for THE DAY THE EARTH STOOD STILL, and am writing to Julian Blaustein, who produced the above, suggesting it as hilarious comedy, and can't you imagine the fun a director could have with it? All those cuties are a natural for Hollywood.—164 Geneva Pluce, Covina, Calif.

This is getting to be a habit with you, but again you seem to be the first to appreciate something I thought would be more obvious—the superlative sly humor in THE NIGHT THE WORLD TURNED OVER. Rogers is a superior writer and we need something of his touch in science fiction if we are to build it into a literature instead of holding it down to the home mechanics' level. Thanks for plug.

## SHE, SEE?

by Marian (with an "a") Cox

Dear Sam: As I understood it, the Ubangi woman's over-sized lip does serve to discourage would-be adulterers, as Ralph Belsinger put it, but in a slightly different way. Seems she sleeps with it on her husband's shoulder, and should she decide to run away during the

night, he has a sporting chance to grab her before she gets far. Why he should, I don't know. This information is a left-over from my fifth grade days, so it may not be too accurate.

May I ask a favor of you, Sam? (Oh, stop trembling. It isn't going to *cost* you anything.) My name, if you'll notice is spelled M-a-r-i-a-n. It has an "a" in it. Would you mind spelling it that way in the pages of TEV? Also spell it that way in my letters to TWS. I've always sorta liked being a female, and it's a wee bit disconcerting to get letters addressed to Mr. Marion Cox. I'm a she, see?

Contrary to my usual custom, I read the whole magazine before writing this letter. Started at the beginning and read all the way through. Whew! What an ish. Best you've had in a long time, and that's going some. Now if you'd just tell us when to expect the next issue, and maybe trim the edges. . . .

You're covers seem to be getting, as my grandmother would say, pretty much of a muckness. Why not relieve the monotony with a few male figures? After all, you've no objection to a story with a hero instead of a heroine. Why object to the hero on a cover? Any *real* reason? Oh, I know; attract the non-fan readers. Well, women can read, too, y'know. Or didn't you.

All of which brings me to something else I want to mention. Mind if I put in a plug for a new and different fan club? It's THE FANETTES, and all members are femme fans. Membership is growing by leaps and bounds as the idea takes hold. The first issue of our fanzine, THE FEMZINE, is already out and the second ish will be quite a bit better. Dues are only 50¢ a year, and for that you get four issues of THE FEMZINE. Come on, gals. Write to me for additional info.

Sam, hate to say this, but I definitely agree with B. G. Warner and Ray Capella. That makes three of us who don't like the change.

As for Mrs. Eunice Shaver—Thank you, thank you. Why not join THE FENETTES? You'll get your men on the cover of THE FEMZINE.

One thing about this sex argument; the little matter in question doesn't appear to be a passing fad. It's probably going to be with us a while. But, after all, aren't we being a little silly about the whole thing? You can't just deny the existence of sex—who'd want to? However, anyone who can't remember that there is such a thing without reading about it every time he picks up a magazine. . . .

And now I'll go crawl back where I came from. Careful, Sam. Put the rock down gently.—79th A.B. Sq., Sioux City, Iowa.

Such a fuss over one little measly letter. After the things I've been called, I've got

over being sensitive about these things. But here's your "a"; you can cool down now and stop throwing off those big blue sparks. They burn holes in the paper.

Don't give up too soon on the covers.

## FANGUAGE

by Barbara Ann Goldblatt

Dear Sam Mines: I have been reading SS for quite a while now (TWS is hard to get around here—get busy!) and I noticed how you always answer questions. I send this letter in the hope that you will answer mine.

Could you please tell me who or what "Ghu" is and define any other bits of Fanguage (fan language) you may have learned? Would you also tell me all known pen names of well-known s.f. authors?

I am thinking of starting a teen-age s.f. fan club, THE AMOEBAS and I need some juicy items for the fanzine's "What Every Fan Should Know" column. I should know, but I don't.—18 Lombardy St., Brooklyn 22, N. Y.

P.S. The stories in the October ish were great, but the editorial was better than any of them. You're really quite a writer. Why don't you write a story?

A personal fan at last! My own personal fan. Maybe because I once lived in Brooklyn? The clean life, the strenuous life. No (sob) Long Island Railroad. But to work:

"Ghu" is a mythical head god to whom one appeals in dire emergencies. It was invented, he claims, by Jerry Bixby, and has spread through fandom with frightening speed. There are many other terms you must be familiar with: prozines for the professional magazines, fanzines for the fan magazines—you just keep reading these columns and you'll find them all sooner or later. As to the pen names of well-known author's, it would take a book to list them. In fact, someone has done it: INDEX TO THE SCIENCE FICTION MAGAZINES by Donald Day. It's sixty-five a copy, but maybe you can borrow a look at it.

Will let you know the next time I write a story.

## LES AMANTS

by Poul Anderson

Dear Sam: A while back, Ollie Saari was in town and we went out to lunch and, naturally, got to talking about Philip Farmer's "The Lovers." Equally naturally, we did a

good deal of raving about it—which, incidentally, everybody else here in the Minneapolis club had been doing too. "But you know," says Ollie, or words to that effect, "all the prudes and old women are bound to write in complaining about it, while people like us won't be heard from. Mines may get the wrong impression of public reaction and decide not to run any more like it. After all, it's the dissatisfied customer who complains."

"Well," says I, "why don't we write in our opinion then?"

"Okay," says Ollie, "let's take a pledge. We'll both write in."

"Skal," says I, lifting my martini. And don't you dast render that as "skoal," if by any chance you print this.

For a change, though, I'm not looking for print, merely for a chance to congratulate you on running so fine a story. Time went by, various unforeseen things happened to delay me, and now another Startling is on the stands and I still haven't written. But here, then, is my personal round of applause.

The general background of the story was beautifully done, with all sorts of fascinating details. To mention only one: The artificial religion, as a device for keeping Earth in subjection, has become a cliché of science-fiction; but Mr. Farmer's shrewd guess that it would, in an age where everybody has heard about Science with a capital "S," embody such pseudo-scientific verbalisms as the founder's traveling through time, is a stroke of genius. The whole future civilization, in fact, is marvelously done, and I, for one, want to hear more about it.

The sex angle was also very ingeniously conceived (no pun intended) and handled (ditto). In fact, the story is almost unique in being based on sex as a biological phenomenon, with no pornography at all. Let's face it, babies are not found under cabbage leaves, and there's no reason why the science-fiction writer shouldn't extrapolate the facts of reproduction as he does those of physics and neurology and the other sexless sciences.

Well, naturally, there are a few episodes which might have been handled more effectively, but it would be sheer pedantry to discuss them—especially since this is Mr. Farmer's first story. Let's sum it all up by saying that quite probably you've found the new Heinlein; and insisting on more yarns from the same typewriter.

'Nuff said. The current issue is entertaining, though none of the stories seem particularly memorable. Glad to see de Camp's coming back next month. And by the way, your new format is very good; now if only we could get more astronomical covers—

Give my regards to Jerry Bixby, as well as yourself. See you in Chicago?—3423 Aldrich Avenue N., Minneapolis 12, Minn.

Our apologies to Poul Anderson—we'd

put this letter aside for a personal answer before we ran it in the column and it got buried under about three hundred books we're going to get around to reviewing some day and before we knew it we were out in Chicago and shaking hands with Poul. "Didn't need an answer," he said graciously. "It was just an honest, exuberant expression—it was something your conscience owes to a fine piece of work."

It's interesting and gratifying that there is no professional jealousy at all among writers. They are so genuinely excited about a good piece of work that you would think it their own. They go out of their way to help a new writer, even though helping him means creating their own competition. It's amazing. They are not all perfect characters by any means, but this artistic, creative integrity which is part of them is bigger than any faults they may have. Makes you kind of proud of the breed.

## BETTER LATE . . .

by George A. Kelley

Dear Sam: Just bought the November, 1952, issue of Startling Stories, and am writing this even before I've read the stories. Why? I did read your editorial and the letters and heard so much praise for "The Lovers", I thought I'd ask you where I can get the August issue so that I can see if it's really as good as they say it is. I don't very often get to read your magazine but I'll be on the lookout for them every month, and if they prove to be good I'll part with \$3.00 (not that I'm a miser) and get a subscription. But I would like very much to procure the August issue of *Startling Stories*, and would appreciate it if you could tell me how.

I liked your editorial immensely. With your permission I would like to class you "tops" with Howard Browne (Amazing) and Ray Palmer (Other Worlds). It isn't every editor that will bring himself to the level of the fan, and I like your apt comments for each letter you publish. Continue, please!—1609 Green Street, Phila. 30, Pa.

Will do.

## . . . THAN NEVER

by Mrs. Darlene Ames

Dear Sam: First, could you please send me a copy of the issue with THE LOVERS in it? It seems I missed that one. Since reading the letters about it in the November SS my curiosity has been so aroused that I can hardly sleep nights. I always did want to

know a bug personally, you know.

Second, please, no Cap Future. In my humble opinion at least, he stunk to high heaven. My, aren't I the old-fashioned one though? (Ends of space? That better?)

Third, what in heck are BEMS and what is stf? I thought it was stuff and then it is used in another way, so what is it?

Fourth, hooray for you. One of my pet hates is a magazine where all the letters to the editor are space goop. You know, everything is a "great galaxy" and "Luna milk" etc., and you, thank goodness, don't dish out that drool.

By the way, I believe in life on the other planets as much as I believe I'm alive. At least my mother said I was alive. Oh, well—613 South 7th St. East, Salt Lake City, Utah.

To George Kelley, to Mrs. Ames and to Helen Hendrix of 4845 Swiss, Dallas Texas, we can only say we don't stock back numbers. We hope some of the fans or some back number store will come to your rescue: Ron. Maddox of 1745 L. St., N.W., Washington, D. C. has back copies of SS, TWS and Cap Future for sale.

Somebody will probably set Mrs. Ames straight on space lingo, but to spare her some more confusion, a BEM is a bug-eyed-monster and stf is science fiction, not stuff. Incidentally, your kind words have the usual tonic effects on the well known heartstrings.

## STILL OOPSLA

by Gregg Calkins

Dear Sam: Despite the attempts of the cover to scare me away, I picked up the November issue of SS the other day. The cover really isn't *too* bad, tho, even if it is impossible to believe the Popp who did it is the same Popp who did the marvelous job last issue.

Speaking of last issue brings to mind the lead novel—"Asylum Earth." I just read that story this month so it's still fresh in my mind (I didn't have a chance to read it before the convention!) and I want to express my appreciation. Even the ending rates a nod from me, and you know how I detest sad endings. But I have a remedy to that. That story is just *crying* for a sequel, Sam, and you know it. So, why don't you get Mr. Elliott on the phone right now, and tell him you want another novel for a sequel to "ASYLUM EARTH," and would he make it a happy ending this time. You can do that right now, Sam—if you haven't already, that is.

For the November issue, "THE STAR DICE" was a really good story. It ranks among your best for the year, in fact. This,

too, cries for a sequel, tho not quite as loudly as "ASYLUM EARTH."

You know, Sam, you surprised me this issue—everything in it was readable, and a majority of it was very good. This is a new high for overall rating of SS from me, tho not the highest individual story rating I've ever given (you know which two stories were best by now!) But "The Crook in Time" was readable, if not more than that, and "The Night the World Turned Over" was even downright fine and dandy. Nothing in the issue was quite up to 'goshwoogee-whizoboy-oboyoboy' caliber, but I reserve that for only top stories.

The short stories, "PROPOSAL" and "SOME LIKE IT COLD," were also good—something different for short stories in SS. What did you do, actually read them this time before buying them?

Your features "Video-Technics" and "Operation Bats" leave me cold, as is usual—they're right on schedule. Bixby, however, rates a nod this time for all the reviews he gave, and a frown at the shortness of most of them. Also a frown for his . . . er, poem. Oh, Jerry. . .

A fanzine review

Is what you're s'posed to do,

So here are a few helpful comments:

Most badly missed

Is the a- and b-list

Even tho they give you some bad moments.

Don't be so darn nice—

Stop acting like mice—

Step up and defend your decisions!

Call 'em black; call 'em white;

Be rude, or polite;

But step *up* and defend your decisions!

So stop patsy-fying

And start *clasi*-fying—

Give us some honest reviews.

Sing praise to the mag

With the old "Twelfth Street Rag"

Or cry with the "St. Louis Blues."

Okay, okay, so I'm not a poet. You don't have to answer it, Sam. I have some pity, you know. Got a kick out of Bix's attempt to analyze fanzines on page 146, Sam. He's trying, but not quite right. As he says, fanzines don't operate at a profit—or even break even. But it's not the exchanges that keep them going. Instead, they are the stone that drags the fanzine down into non-profitism. Fanzines lose, I would say, a minimum of \$10.00 per issue, basing these figures on the average mimeo'd 8½x11, 30 page magazine. And that's as cheap as you can go. Some fanzines—in fact, most fanzines—lost a great deal more. What keeps them in business? What keeps *any* hobbyist going? But this is partially the ability to be heard, the chance to become well known in your own circles, the chance to talk with a great deal of people at



one time. Call it egoboo, call it back-patting, call it whatever-you-will.

As to the letters—everything this time seems to be raving about Farmer's "THE LOVERS," and my own missile decrying it hit the waste-basket. I feel I need a chance to explain my feeling re the "Lovers." Now, admittedly you broke all kind of tabu's and so on, Sam, and I admire this spirit, if not the result. And, it was a nice idea. In fact, it was an excellent bit of writing, from a literary point of view, giving a new treatment, plot, and ending to his type of story. So it was excellent. So was Jules Verne's "20,000 Leagues Under The Sea." The whole point of it is, Sam, I didn't expect to find it in my favorite s-f magazine. I wouldn't have expected to find either of the above mentioned stories in SS, regardless of how good (from a literary point of view) they were. I don't read SS to read literary stories, I'm afraid. I read it for science-fiction. And, like Gernsback, I tend to like the emphasis on *science* rather than on fiction.

Allright, Sam, I'm going. But I still didn't care for the "Lovers" and I still liked the November issue. Give "Jerome" a pat on the head for me, and ask him for some helpful, informative reviews—on my part, anyway, if he won't do it for everybody.—761 Oakley St., Salt Lake City 16, Utah.

We agree on one thing anyway—you're no poet. Fact, you're even worse than I am and I'm so bad I don't even try unless cornered like a rat and forced to fight back. But I hate to do it because even a four line verse from me has been known to disable strong men and kill weaker ones outright.

Generally speaking, Gregg, I've no quarrel with your taste in stories; sometimes you actually get the point. But we part company in emphasizing one word in science-fiction. You're emphasizing the first word, I am leaning on the second. And the time is drawing close when fans will have to stand up and count noses as to who stands where in the decision whether we print "popular electrical experiments" or worthwhile literature on a future motif. Or the answer may be to print both, for more than one kind of reader.

## GRAETZ STUFF

by J. Martin Graetz

Dear Sam: Well, I see that Popp, old Wally Popp, is back. And with the same scene, except that the girl took off her spikes, and the hero battles mono-jets instead of infantry. Can't resist a femWhathaveyouHero

now & then, huh? I'm not one for technical errors, Sam, but I am really worried about that heavily-traveled top ramp in the background. It kin' o' sneaks ahint of that building and Bingo! Space-warp?

Stories, good as usual. Actually, THE CROOK IN TIME surprised me pleasantly. Usually, when you ballyhoo a story as funny, it turns out to be a horror like MAJOR VENTURE. But this was really good.

Orchids to Rogers. Keep him on.

This "we're property" idea seems to be undergoing a revival in a different form. You've had two in a row now, ASYLUM EARTH, and THE STAR DICE.

Say, Sam, is A. McWilliams, creator of "Twin Earths", actually Jack Williamson? I read that he was going to start a comic strip, but didn't catch the name or theme of it.

Speaking of cycles—and no one was—here's one.

What is one of the main reasons that a stf story is a success? Because it has a new idea or theme. This is why space-opera is on its way out as a mainstay of s-f. It has been gone over so much in the past 20 years that readers are tired of it. The demand now is for mood, psychology, logic, and others that are basic in fiction. So, As you said, these stories will seem old-fashioned in another 15 or so years. (The Cerebral is creaking right now.) So the stf writer of 1967 is racking his brains for an idea. After all, people are getting tired of deep insight, or psycho-opera. THEN

"Hey, I got it! About 30 or 35 years back they had a great theme. Galactic Empires! Futuemen and Lensmen. AKKA I.P.C. Xenol!"

And the psychiatrist-turned-editor writes back,

"Swell! Just the thing to pep up the pages of the mag."

And UTTERLY IMPOSSIBLE NEU-ROSES becomes STARTLING STORIES again. And the whole thing is started again.

Don't get me wrong, Sam. (How can you help it?) Science-fiction will get better as it rises from the quagmire of slush and public anti-feeling. We can see indications of that right now. Compare THE HELLFLOWER (Poor ending and all) with PATTERN FOR CONQUEST by the same author. Or JACK OF EAGLES with THE GRAY LENS-MAN. (He had psi talents too.) Science-fiction will continue to grow up, because no matter how many scientific advances are made, or how soon space is conquered, there's always more for writers to speculate and extrapolate on. Stf will never creak, I think.

Well, you get the idea, Sam. See ya.  
307 So. 52 St., Omaha 3, Nebraska.

P.S. When do we get more Bixby? Boy can he write!

Check on no-creak science fiction. So

long as it continues to be a literature of ideas it will keep ahead—and likely keep ahead of mass public taste too. Which promotes a quandry for the serious science fiction fan. Will he accept a widening of stf's appeal, so as to draw in a larger audience which can be slowly educated, or will he insist upon being *avant garde*, thus staying well ahead—and outside—the average public comprehension? And for another word on this see—

## MAGIC MIRROR

by Richard E. Geis

Dear Sam: I'm going to shelve my regular policy of commenting on the stories, cover, features, letters, etc., and talk for a page about what seems to me to be a very heartening sign along the science fictional road to acceptance by the general public.

In this city, Portland, Ore., television is just now rearing its 17 to 30 inch head. And, just recently I read an article in one of the mass circulation weeklies about the fad of "Buzz Cory—Commander of the Space Patrol". The article went on about how popular was the program, how much merchandise was being sold of a science fictional character, and how many millions of kids were devotees of that and other similar programs.

It occurred to me that quite possibly here was the character that science fiction needed to popularize itself. A science fictional Sherlock Holmes. Two media of mass communication are spreading the gospel; radio and television. What is more important is that the kids, the pre-high school youngsters, are developing a taste, a fondness, a liking, a craving for science fiction.

True, the science fiction they like is the thud and blunder juvenile stuff. You can't expect a seven or eight year old to appreciate a Bradbury in the fullest sense, but those kids are going to grow up and mature in a few years. They will graduate from the "kid stuff" on radio and TV and come to you and your competitors for their entertainment.

Ah, Sam, the golden years are before us. Think of it; millions and millions of new fans, millions and millions of dollars spent for science fiction. The snobbish, intellectual, "mature" fans will have to admit that the lowly Buzz Cory and friends are doing more for science fiction than they could possibly do.

I'm just idly curious, Sam, has your circulation been climbing of late? Have you seen any straws in the wind to indicate that the earliest crop of Buzz Cory fans have entered high school and paid hard cash for *printed* science fiction? I say *printed* because I've heard that TV tots are forgetting how to read.

Maybe after I get my television set, I'll forget to read.—2631 N. Mississippi, Portland 12, Oregon.

The kids are going, hook, line and sinker for science fiction. But of course it is all the thud and blunder. Which means that

what attracts them is only the excitement of new gadgets—space helmets, rockets, ray pistols—on exactly the same level as westerns. But, as you say, it may, all unwittingly, lay a groundwork which will enable them to graduate painlessly in a few years to the more mature work.

Incidentally, having owned a television set for about four years. I am in a position to have observed something in connection with it. The level of entertainment presented is too low to give serious competition to reading, even for juvenile tastes. Confirmed pulp readers (and by the term pulp I exclude science fiction) may stop reading for some time when they first get their tv set—even for as much as a year. But eventually it palls and they turn back to reading. Better minds and tastes have a shorter weaning period or take tv only in measured doses. While conceivably tv could grow up and start to present adult material, the fact that radio never did is depressing argument to the contrary. The fact is that anything which must reach a common denominator has to get down quite a bit, whereas a more specialized medium can pick its own audience.

## BOY MEETS GIRL

by Miss Teddy Marsh

Dear Sam: Imagine my surprise—here it is not even October and I find the November SS on the stand. You people are really prompt. Trembling with excitement and feminine curiosity I searched all through TEV—alas, alack—no letter, no fame, no nuttin'! Not even the information I so eagerly requested.

But then I realized that my letter must have been received long after you had already gone to press so I thought I'd write and bend your ear again. If you notice, in this letter I address you as "Sam"—well, after all this is the second time I am writing, even if my first attempt wasn't early enough or brilliant enough to make your volume, I somehow feel that we are acquainted.

Just in case my other letter went astray I am repeating my request—are there any fan clubs here in Atlantic City and how can I contact them? Please forward this information to me somehow as I have several friends who continuously bombard me (a la Peter Lorre) "Did you get the information, Miss Marsh?" And again I repeat—we don't want any mushy love stories, but please don't take all the romance out of Science Fiction because who wants a try at the stars without a chance at "Boy Meets Girl?"

It is so hard to get a letter of this type started but once you get the bug it is hard to stop. I'll try to close by saying that I love your cover format and find the majority of your stories of a type high enough to be worthy of reprint. Thanks for listening.—223 S. Rhode Island Ave., Atlantic City, N.J.

Our memory isn't what it used to be, but we think we did print your earlier plea in some form or other. If not—here's hoping you get your Atlantic fans.

## DETOUR

by Sheldon Deretchin

Dear Sam: I've just decided that it's about time you should print another of my letters. You didn't print my last one, you know. Tsk, tsk. And I don't care if it does end up in the wrong mag this time. I intended this for SS, but I'll probably be routed through TWS and FSM and finally end up in the 1955 WSA.

You should be glad that I don't have a penchant for long letters like those of Calkins. How could you stand a page and a half of this non-profound verbiage? I can't stand it myself.

At this point I suppose I should give an erudite analysis of the latest ish of SS. But since (as usual) I don't have one lousy two-bits to buy the mag, I'll have to wait until I can get it in my used mag shop, just in time for it to become a collector's item.

By the way do you know anybody in Brooklyn who has a decent mimeo I can borrow to put out my fanzine "Variant World"? I'm desperately in need of one.

Ghaaaaaa.—1234 Utica Avenue, Brooklyn 3, N.Y.

Not only don't I know anyone with a mimeo machine in Brooklyn, but since escaping from that peaceful borough a couple of years ago, I don't even seem to know anyone there, period. But there are fans in Brooklyn, so perhaps this touching plea will earn you the loan of a machine. Let's see what pulling power these colyums have. As to your perpetual state of brokenhood—it would cost you twenty cents even to come in here for a free copy, so that wouldn't do you much good. Looks like you'll have to go to work.

## OKEFENOKEE

by Richard G. Gross

Dear Sam: In answer to the question of a certain 13 year old Californian's letter from last ish: There are, I believe, very few young people's fan clubs, but there may be more than just ours (5 members) and trying hard to expand. The club is still in its infancy. Ron, but we are getting on our feet with all gyros running and with atomic power we'll stay there. (Not one member over 15.)

Say, Sam, my brilliant "mind" has just come up with a wonderful idea. (Gulp!) How about putting Pogo in s.f. (gasp!) There, I said it! And I'm glad!

Sam—control yourself! I won't ever mention it again—But you could try—! (CRASH!)

[Turn page]

# MEN 17 to 45 WANTED



to prepare  
for

- REAL MONEY
- INTERESTING WORK
- A GRAND FUTURE
- ... in ...

## TELEVISION

Make no mistake about it! Television now offers you one of America's most promising opportunity fields for a fine job or your own profitable business. Get surprising facts showing how you may now use an amazingly interesting and effective method—at home in your spare time—to get the very training and starting help needed. Simply write "Give me facts about Television" on postcard. Include your name and address and mail to:

One of America's foremost  
Television Training Centers



**DeFOREST'S TRAINING, INC.**  
2533 N. Ashland Ave., Dept. TF-2  
Chicago 14, Illinois

## Success-Winning VOICE

Sound like the HE-MAN you are

STRENGTHEN your voice this tested scientific way. Yes—you may now be able to improve the POWER of your speaking and singing voice . . . in the privacy of your own room! Self-training lessons, mostly silent. No music required.

**FREE BOOK** Write TODAY for Eugene Feuchtinger's great booklet "How to Develop a Successful Voice." It's absolutely FREE! You must state your age. Booklet mailed postpaid in plain wrapper. No salesman will call. Send your name and age RIGHT NOW! Perfect Voice Institute, 210 S. Clinton St., Studio A-K-6, Chicago 8, Ill.



## Learn BAKING At Home

Baking is one of America's high industries in wages. Nearly depression-proof. Thorough basic home course lays sound foundation. If you have aptitude, write for FREE BOOKLET, "Opportunities in Commercial Baking."

National Baking School, 835 Diversey Pkwy., Dept. 1802, Chicago 14



## MAKE EXTRA MONEY

### EVERY BUSINESS EVERYWHERE USES UNION LABEL BOOK MATCHES

No experience needed to earn big daily commissions. Be a direct factory representative of the world's largest exclusive UNION LABEL Book Match manufacturer. Prospects everywhere. Feature Glamour Girls, Hillbillies, seascapes and dozens of other styles—Double Books—Jumbo Books—nearly 100 color combinations. New, bigger portfolio makes this fastest selling line a real profit maker for you. Write TODAY for full details.



### SUPERIOR MATCH CO.

Dept. B-283, 7828 S. Greenwood Ave., Chicago 19, Illinois  
West Coast Salesmen, write Box 1087, San Jose, Calif.

Okay, I'll go.—1151 Regina St., North Bay, Ont., Canada.

S'a funny thing. Practically all science fiction fans also dearly love Pogo. Yet they scream about fantasy in the science fiction magazines. And Pogo is pure, wonderful fantasy, whimsy, what have you. -We personally love Pogo. But we don't particularly think Pogo is science fiction any more than Aesop's fables or Alice-In-Wonderland is science fiction. Unless you figure that a large slice of science fiction is satire and any format goes under satire. But I don't think there'd be much point in turning ole SS into a comic strip, even a good comic strip.

## THAT BASIC DRIVE

by Bob Kessler

Dear Sam: The change in your cover surprised me when I first spotted it on the rack. While admiring the change, a little thought hit me, to quote: "Maybe Sam has increased the quality of the stories in good old SS." After reading that issue I found myself mildly disappointed. I remained in this state until I read the lead novel in the Oct. issue.

ASYLUM EARTH is a different novel. It has in its plot a strange and novel twisting of old ideas until it is hard to spot them. Bruce Elliott did a bang-up job on it. There was only one other story that I really liked, it was GRAVESONG by Walt Miller.

I see that the old bugaboo of sex V.S. anti-sex in stf is still being fought in your letter section and I would like to get my two cents worth in. In almost any other field of fiction, sex is recognized as a human drive and treated as such. In the classics you will find the use of a basic drive, sex, as a integral part of the story. If you find sex in these fields, why outlaw it from stf? Stf, as it has developed today, treats people and the actions of people to the effects of "scientific progress", if sex has something to do with the story and its description of the actions of the characters, it should be included in the story, not outlawed.

Keep up the good work, Sam. Maybe some day I'll find some money to subscribe to SS.

P.S. Send our thanks to Jerry Bixby for his mention of our fanclub, Infinity, in his TWS fan frying pan.

Don't forget your address on your letters, Bob. It may just happen, by some odd chance, that someone may want to write you and lacking your address they are going to write me—and brother, I get plenty of mail now.

## AND SUTTON DEATH

by Dick Clarkson

Dear Sam: I have nothing much to say

about anything in particular except for one li'l item . . . the letter (unsigned, note . . . maybe he doesn't want to get any mysterious packages in the mail; no address) by one Craig Sutton. My dandruff is up, but good!

For one thing, THE LOVERS had MAJOR VENTURE beat by a few hundred kilometers. But what I do take exception with was his Theory of the Formation of the Solar System. Both technically and ethically.

Ethically because he stole it! Shamelessly and possibly unwittingly, but nevertheless, he stole the ideal I happen to be a collector of, among other things, an unknown magazine known in the trade as aSF. Well, I happen to remember a certain letter in the column of the November, 1947 issue where somebody put forth exactly the same theory. Only Theocrastus Q. took the form of a Cosmic Being, and the ostrich egg was a guz egg. Other than that, the ideas are identical. The good Mr. Sutton polished it up a bit, but it was the same! Yer honor, this must stop!

Technologically because it has been proven beyond the shadow of a doubt that a pilfrometric neo-fan cannot work. This can be shown when you see that your panendemic tremie pipe—and *not girdlespring*, as he had it—cannot be put into conjunction with a semi-boloid psychofrantic bovallipus snalligaster. It is even easier to see when you realize that a tremie pipe and a girdlespring (no matter which) are related to the drawn grastanatic jorp, and therefore are machines. While the Bovallipus Snalligaster (spelled correctly with a "y" and not an "i") is a cousin to the argopelter, and therefore an animal. The snalligaster, as everyone knows, has one set of legs—those on his left side—shorter than the ones on the right, therefore making it easier for him to walk about the hillsides. The argopelter is just the opposite; the wrong side of legs is long, so he cannot travel at all on hills without falling on his gramf. See?

As to your stories . . . I see that you have found some good shorts lying about (probably in the "rejected" basket) and, out of lack of bad ones, printed them. The novelets were good, as per usual. I wish I had time to read the novel, but college demands are slightly more than I can take and read long novels, too.

All in all, a very good ish. The longer you keep it up, the more letters you'll get from me.

Hey! Sam! Don't throw that!—*Harvard University, Lionel B-12, Cambridge 38, Mass.*

Ever notice that whimsy reacts upon the fans like waving a red bull in front of a flag? MAJOR VENTURE set Craig Sutton off like a sky-rocketing pinwheel and Sutton apparently set off a chain reaction which is causing Clarkson to give off sparks. Who's next? So far as swiping ideas go—hah! You could go back a whole lot further than November 1947. How about Sinbad and the roc?

## SOLO

by Amaryllis McHugh

Dear Mr. Mines: I am a new reader of S.F. and I find myself rapidly becoming an ardent fan. As a result, I find most of my friends shouting "Escapist!", while quirkling the proverbial eyebrow in my direction. I get the last laugh, however. They read the newspapers and have nightmares!

I am as yet unfamiliar with a good deal of the S.F. vernacular, but please don't hold it against me as I just discovered S.F. this past month. Given time I hope to overcome this deficiency.

This is my first letter to an editor of any publication, but after reading your entertaining letter column I decided to break my precedent and tell you how much I enjoy the column—and your somewhat acidulous comments.

I would like to make one remark about your lead novel **THE STAR DICE** by Roger Dee. It was this novel that made me awake to the potentialities of S.F. as a whole. I read it twice and this is the highest compliment I can pay any novelist, no matter who.

Thank you for introducing me to S.F. in such a pleasant way and blessings on your work.—4709-34th St., Apt. 9, San Diego, Cal.

I don't see that science fiction is especially more escapist than any other form of literature—it is all escapist in some degree. But people read for different reasons; some to flee their own environment, some to learn or to be stimulated by fresh ideas. Certainly science fiction provides more fresh ideas than anything else being written today and why shouldn't we assume that you read for stimulation rather than escape? Ignore the scoffers; they're probably just jealous because they can't understand phrases like "temporal time warp" and stuff like that. (Neither can we, but nobody knows it.)

## CONVENTION DOWN UNDER

by R. D. Nicholson

Dear Mr. Mines: I write to you in the hope that the TWS-SS Group will come good again with a bit of free publicity for our second down-under Convention. Last year we got the news to you a bit too late, the **STARTLING** giving out the good word getting out here about a month after the con was over. However the date for this year's effort has been set later, and we hope to have our publicity out in time.

The Better Pubs magazines are very popular out here, and would be more so if more of them could be got. As long as **STARTLING** can keep coming up with good long novels, you have one aspect of the field on your own. I hope also that your long-overdue change in cover policy brings you that section of the market you're aiming at, and deserve to get. If you will give us a mention in the first

[Turn page]

# ACCOUNTANT BECOME AN EXPERT .. BOOKKEEPER .. C.P.A.

The demand for skilled accountants—men and women who really know their business—is increasing. National and state legislation is requiring of business much more in the way of Auditing, Cost Accounting, Business Law, Organization, Management, Finance. Men who prove their qualifications in this important field are promoted to responsible executive positions.

Knowledge of bookkeeping unnecessary. We train you from ground up, or according to your individual needs. Low cost; easy terms.

Send for free 48-page book describing the LaSalle accountancy training and the opportunities in this highly profitable field—plus "Ten Years' Promotion in One," a book which has helped many men.

## LASALLE EXTENSION UNIVERSITY A CORRESPONDENCE INSTITUTION

-----417 S. Dearborn Street-----  
Dept. 2329 HR, Chicago 5, Ill.

Please send me "Accountancy, the Profession that Pays"—plus "Ten Years' Promotion in One"—without obligation.

- ☐ Higher Accountancy
- ☐ C.P.A. Coaching
- ☐ Bookkeeping
- ☐ Law: LL.B. Degree
- ☐ Business Management
- ☐ Salesmanship
- ☐ Traffic Management
- ☐ Foremanship
- ☐ Industrial Management (Machine Shorthand)
- ☐ Stenotypy

Name.....Age.....

Address.....

City, Zone, State.....



## "How to Make Money with Simple Cartoons"



A book everyone who likes to draw should have. It is free; no obligation. Simply address **FREE BOOK**

**CARTOONISTS' EXCHANGE**  
Dept. 72 Pleasant Hill, Ohio

## POKER CHECKS

Famous Hub Checks, Non-Duplicate, Square Edge, Heaviest Game Check, Cut and Stack Accurately. Supplied in any color.

**FREE CATALOG** Expose: The Open Book, Sealed Book, Scientific Betting, Master Key System, How to Control Fair Dice, Runup System, Plastic Playing Cards for Club Use.

**"The Old Reliable"**

**K. C. CARD Co., 843 S. Wabash, Chicago 5**



## BE A Nurse LEARN AT HOME

Practical nurses are needed in every community... doctors rely on them... patients appreciate their cheerful, expert care. You can learn practical nursing at home in spare time. Course endorsed by physicians, 54th yr. Earn while learning. High School not required. 18 to 40. Trial plan. Write now!

**CHICAGO SCHOOL OF NURSING**  
Dept. 422, 41 East Pearson Street, Chicago 11, Ill.

Please send free booklet and 16 sample lesson pages.

Name.....City.....State.....Age.....

STARTLING you can get it into, it will probably bring a lot of enquiries our way. The con is to be a three day affair, with films, displays, etc., and will take place over the first weekend in May, 1953.

Well, that winds up this note, except to say 'Keep up the good work', and best of luck to all five mags.—24 Warren Rd., Double Bay, Sydney, Australia.

Well, we see the space is all gone again. So for some quick also rans: Myron Ferreira, 167 Hudson St., Hackensack, N. J., wants fans to write to him, Leonard Gleicher—guk—that purple ink on pale blue paper, who can read it? James Lewis wants to know who told us we could have the best covers in the field? We got your address, Jimmy; Rt. 4, Trenton, Tenn.: your subscriptions are entered. Raymond Gross, 1514 N. Sierra Bonita, Hollywood, 46, Cal., wants to write to somebody—anybody—and wants to know about an S.F. book club. We've printed an address twice, you must have it by now.

Al Comfort, 2264 Chestnut Ave., Long Beach, Cal., thinks SS is improving—nice letter. Fredrick B. Christoff, 39 Cameron St. S., Kitchener, Ont. Canada writes a 13 page letter, handwritten, containing a dictionary of stf terms—hilarious, but too long. Mrs. Robert S. Carney, 3551 Midland, Memphis, Tenn., has a complete file of SS since 1939 for sale. J. T. Oliver liked STAR DICE—a *Republican* in Georgia? Eugene Caldwell, 5770 N. River Forest Dr., Milwaukee, Wisc., wants to know how he can get a copy of TOMORROW SOMETIMES COMES (write Ken Slater.) Also needs a copy of SS for March 1952.

Eunice Schaver has joined up with Marian Cox in their "for women only fan club," though they will break down and permit any male with 15¢ to buy a copy of their femzine. (Real nice of you, kids.) David Elderkin, 1945 S. Keeler Ave., Chicago, Ill. liked THE GUIDED MAN because he is a real sex-fiend. (Bragging, Dave?) Naaman Peterson says we have swell writers (Joe Semenovich, Gregg Calkins, Jim Harmon) to name a few. The pros? Oh, they're pretty good too. William E. Boehmer, Plymouth, Mich., thought ASYLUM EARTH was great stuff, would like more and bigger pictures for all stories. Jack Miller, 15219 Regina Street,

Allen Park, Mich., is only 14 but already a reader for life of SS, he says, all because of BIG PLANET.

Larry Ketcham, Waterford, Cal., liked ASYLUM EARTH, wants to know if Bruce Elliott is a new writer. Not exactly, Larry; he's an old time detective and mystery writer—magic is his hobby and he dabbles in voodoo and occult stuff. Jack Gatto, 42 Oakland Ave., Uniontown, Pa., still writing to Merwin, announces a new fanzine to be called "Manure" and any fans helping to distribute it will receive an honorary placque as a "Manure Spreader." Funny—?? We're dying. Jan Gardner, Apredelon, Canterbury, N. H., raves about Joel Townsley Rogers and THE NIGHT THE WORLD TURNED OVER.

Edwin Lee screams "Leave Captain Futurè OUT!" and complains about corn in the editorials. (You should complain—you've only got to read them, I've got to write them.) Burton K. Beerman, Grove School, Madison, Conn., wants more fanzine news and disagrees with J. T. Oliver on THE LOVERS. Says Jeanette was repulsive to J. T. only because of back-ground training. Allan S. Gelb, 2957 Hale St., Phila, 24, Pa., liked THE GUIDED MAN, registers an objection to Bradbury. (Why bring that up now?) C. A. Lexton, 16452 Moorpark St., Encino, Cal., has a shot at defining stf, fantasy and science-fantasy—he says it is a matter of the degree to which each is scientifically correct and logical. Ron Ellik, 232 Santa Ana, Long Beach, 3, Cal. didn't like ASYLUM EARTH nor THE LOVERS. He buys SS for the letter column.

Robert C. Hughes, 1127 River Road Dorms, Ohio State Univ., wants to know if there is a fan club in Columbus, Ohio. And Harry Calnek, 516 West Mary St., Fort William Ont., Canada, does a spot of raving about Joel Townsley Rogers, hoping we can drag him away from the slicks; also stops to mention his gratification that the great majority of fans appreciated an outstanding job like THE LOVERS thereby proving their maturity. Hillel Handloff, 37 So. Delancy Pl., Atlantic City, N. J., has over a hundred stf magazines to sell. And Joe Gibson says join the 11th World S-F Convention now, send a buck to P.O. Box 2019 Philadelphia 1, Pa. That's all!

—THE EDITOR

**Fight  
Polio**

*Join the*  
**MARCH OF DIMES**

*Jan.  
2-31*



# REVIEW OF THE CURRENT SCIENCE FICTION FAN PUBLICATIONS

**H**ELLO.

And without further ado:

**FANTASY-TIMES**, 137-03 32nd Avenue, Flushing 54, New York, N. Y. Editor: James V. Taurasi. Published bi-weekly; 10c per copy. Tops in fanews . . . as usual.

**SCIENCE FICTION NEWSSCOPE**, 43 Tremont Street, Malden 48, Massachusetts. Editor: Lawrence R. Campbell. Published monthly; 5c per copy.

News, local and foreign, and ramblings . . . also stuff on sfantasy mags, books, films, TV.

**INSIDE**, 332 East Date Street, Oxnard, California. Editor: Ron Smith. Published irregularly; 25c per copy.

Newcomer . . . neat little job. Stories, articles, features.

**IT**, addresses below. Editors: Robert W. Chambers and Walter W. Lee, Jr. Published irregularly; 15c per copy.

The addresses are as follows (and how complicated can you get?):

## WINTER ADDRESSES (Sept.—May)

|                        |                   |
|------------------------|-------------------|
| Walt Lee               | Bob Chambers      |
| Blacker House          | TKE-OSC           |
| CalTech                | 660 Madison       |
| Pasadena 4, California | Corvallis, Oregon |

## SUMMER ADDRESSES (June—Aug.)

|                     |                    |
|---------------------|--------------------|
| Walt Lee            | Bob Chambers       |
| 1205 S. 10th Street | 990 N. 10th Street |
| Coos Bay, Oregon    | Coos Bay, Oregon   |

Contains fiction, articles, features, news . . . I particularly liked Lee's little allegory **SPARK**. Also a blood-chilling bit by Ray Bradbury, which should've stood in bed. From the trunk, Ray?

**COSMAG/SCIENCE FICTION DIGEST**, 57 East Park Lane, N. E. Atlanta 5, Georgia. Editors: Ian T. Macauley and Henry W. Burwell. Published bi-monthly.

A double-edged blade . . . 2 in 1. The Cosmag section contains stories, articles, features, letters; the SFD section is a single page, re-

[Turn page]

## "YOU ARE UNDER ARREST!"



There's a Thrill in Bringing a Crook to Justice Through Scientific

## CRIME DETECTION!

We have taught thousands this exciting, profitable, pleasant profession. Let us teach you, too, in your own home. Learn Finger Printing, Fire Arms Identification, Police Photography and Criminal Investigation thoroughly, quickly and at small cost.

**Over 800 of All American Bureaus** of Identification employ students or graduates of I. A. S. You, too, can fit yourself to fill a responsible crime detection job with good pay and steady employment. But don't delay—get the details now. Let us show you how easily and completely we can prepare you for this fascinating work, during spare time, in your own home. You may pay as you learn. Write today . . . Now . . . Be sure to state age.

**Be A  
FINGER  
PRINT  
Expert**

**FREE!!!**  
Send for Thrilling  
"BLUE BOOK  
OF CRIME"

**INSTITUTE OF APPLIED SCIENCE**  
1920 Sunnyside Ave., Dept. 7962, Chicago 40, Ill.

## STUDY **LAW** FREE AT HOME **BOOK!**



### Prepare for the Bar!

Write today for a copy of our FREE book, "The Law-Trained Man," which gives the bar rules in your state and tells how ambitious men and women since 1890 have been preparing at home in spare time for the practice of law by studying the famous Blackstone bar-training course. All needed instruction material is furnished including big 16-volume law library. Law diploma awarded. Moderate tuition; easy monthly terms. Write for FREE book today!

**BLACKSTONE SCHOOL OF LAW**  
225 N. Michigan Ave., Dept. 252, Chicago 1, Illinois

## INVENTORS

Learn how to protect your invention. Specially prepared "Patent Guide" containing detailed information concerning patent protection and procedure with "Record of Invention" form will be forwarded to you upon request—without obligation.

**CLARENCE A. O'BRIEN & HARVEY JACOBSON**

\* Registered Patent Attorneys

38-A District National Bldg. Washington 5, D. C.

## RUPTURED?

### Get Relief This Proven Way

Why try to worry along with trusses that gorge your flesh—press heavily on hips and spine—enlarge opening—fall to hold ruptured? You need the Cluthe. No leg-straps or cutting belts. Automatic adjustable pad holds at real opening—follows every body movement with instant increased support in case of strain. Cannot slip whether at work or play. Light. Waterproof. Can be worn in bath. Send for amazing FREE book, "Advice To Ruptured," and details of liberal truthful 60-day trial offer. Also endorsements from grateful users in your neighborhood. Write:

**CLUTHE SONS, Dept. 33, Bloomfield, New Jersey**

## Free Yourself FROM Tobacco Habit

If you want to stop smoking and just can't, try world-famous **NO-TO-BAC** Lozenges. See how quickly **NO-TO-BAC** may help stop your craving for tobacco. Rush \$1 to **NO-TO-BAC**, for 7 days supply. (For heavy smokers—16 days' supply—\$2.) Satisfaction guaranteed or money back. Write:

**NO-TO-BAC CO.**  
DEPT. S. HEWLETT, NEW YORK

# EAR NOISES?



If you suffer from those miserable ear noises and are Hard-of-Hearing due to catarrh of the head, write us NOW for proof of the wonderful, palliative relief many people have reported after using our simple home treatment. **NOTHING TO WEAR.** Many past 70 reported such relief in hearing and ear noises. **SEND NOW FOR PROOF AND 30 DAYS TRIAL OFFER.**

**THE ELMO COMPANY**  
DEPT. 3TF2 DAVENPORT, IOWA

## Learn Profitable Profession in 90 days at Home

**MEN AND WOMEN, 18 TO 60.** Swedish Massage graduates make big money working full or spare time with doctors or in hospitals, health resorts, sanatoriums, clubs, private practice. A dignified interesting career! Qualify for your graduation certificate. Thorough instruction at home as in class rooms. Write for Illustrated Book—FREE!

**The College of Swedish Massage**  
Dept. 363-B, 41 E. Pearson, Chicago 11

## FREE—Amazing Book on RHEUMATISM, ARTHRITIS

If you suffer the aches, pains and discomforts of Rheumatism, as manifested in ARTHRITIS, NEURITIS, SCIATICA or LUMBAGO, send today for the FREE Book. It reveals important facts about why drugs and medicine give only temporary relief without removing causes. Explains fully a proven, specialized system of treatment that may save you years of distress. No obligation. Write for this FREE Book today! **BALL CLINIC, Dept. 804, Excelsior Springs, Mo.**

## STOP TOBACCO



Banish the craving for tobacco as thousands have with Tobacco Redeemer. Write Today for free booklet telling of injurious effect of tobacco and of a treatment which has relieved over 300,000 people.

In Business Since 1909 — **FREE BOOK**

**THE NEWELL COMPANY**  
153 Clayton St. • St. Louis 3, Mo.

## BE A DETECTIVE

WORK HOME or TRAVEL. Experience unnecessary. **DETECTIVE** Particulars FREE. Write **GEO. T. H. WAGNER, 125 W. 86th St., N. Y.**



## Find HIDDEN TREASURES

**GEIGER COUNTERS** for Uranium Detection (see at left). **TREASURE DETECTORS** for gold, silver, etc. Light-weight, ultra sensitive. None finer at ANY PRICE. New Models available.

INFORMATION FREE

**Detectron Co.** Dept. 27  
5631 Cahuenga, No. Hollywood, Calif.

counting HWB's back-and-heart-breaking adventures with "several tons of type, cuts, leads, rule, type-cases, ink, press, etc."

Better you should mimeograph, h'm?

**SPFS NEWS, Box 89, Rummeneide, New Jersey.** Editor: Dave Hammond.

Mostly chatter about the "Impromptucon," which burst upon sedate Philly one night, we are led to understand, just out of nowhere. Someone simply said, "Let's go!"

Sounds like fun.

**A CHECKLIST OF FANTASTIC MAGAZINES**, published by Bradford M. Day, 127-01 116 Avenue, South Ozone Park 20, New York, N. Y.; and Raymond Isadore, 1907-A South 14th Street, Milwaukee 4, Wisconsin. \$1.00 per copy.

Lots of material in a small package . . . a good item for the collector who wants to complete his files, listing practically all sci-fantasy mags from 1895 to 1952, name, volume and number.

Can be obtained from Day or Isadore.

**HYPHEN**, produced between issues of **SLANT** by Walt Willis, 170 Upper Newtownards Road, Belfast, Ireland; and Chuck Harris, 'Carolyn,' Lake Avenue, Rainham, Essex, England. Two issues for one U. S. stf promag or 1/6, payable to Willis, or deductible from subs to **SLANT**.

Letters, chatter, a report on the '51 British Con by William F. Temple.

Willis writes enjoyable chatter.

**SPACESHIP**, 760 Montgomery Street, Brooklyn 13, New York, N. Y. Editor: Bob Silverberg. Published quarterly; 10c per copy.

Third Anniversary Issue . . . up to snuff for this 'zine, and then some. Silverberg is either one of the more selective fanzine editors, or plain lucky.

**CONFUSION**, Box 493, Lynn Haven, Florida. Editor: Shelby Vick. 5c per copy.

Big nickel's worth, I'd say . . . lively and readable. Stories, articles, features, letters, spoofs. Give it a try.

**SPACE REVIEW**, P. O. Box 241, Bridgeport 2, Connecticut. Editor: Max Kregel. Published quarterly; 35c per copy.

Professional print job . . . somebody is shel-ling out.

Deals primarily with flying saucers, being the official organ of the International Flying Saucer Bureau: contains reports on sightings, speculations by Bureau members as to the nature of the phenomena, and an editorial notable for its eager assumptions. Also some stf news items, and a short story which is either a spoof or a catastrophe. Keep your eye on the 'zine, though . . . will probably develop.

There's an important difference between wild surmise and speculation within a frame-work.

**STF TRADER**, 1028 Third Avenue South, Moorhead, Minnesota. Editor: K. Martin Carlson. Published monthly; 10c per copy.

Book-and-magazine advertisements . . . collectors, please note.

**MICROCOSM**, journal of the Fantasy & Science-Fiction Book Club, 130 Vera Street, West Hartford 9, Connecticut. Editor: Ronald D. Rentz. Published monthly; 10c per copy.

Fandom's "Book-of-the-Month" Club. By buying your scifantasy books from Rentz & Co., you save 16% . . . and if enough members join, it'll go up to 25%. Needed: 350 members. 'Nuff said?

**THE FEMZINE**, 79th A. B. Sqdn., Sioux City, Iowa. Editor: Marian Cox. Published quarterly; 15c per copy.

The organ of the Fanettes . . . whoops! Contains stories, poetry, news, a crossword puzzle. More power.

**THE CHIGGER PATCH OF FANDOM**, (contains all addresses but its own). Editors: Bob Farnham; Nan Gerding. First issue; no price listed.

Although apparently and somewhat derisively rigged to give some information to fans, on the whole this newcomer matches its own masthead in telling virtually nothing at all about anything. Two other characters, Rich Bergeron and Nancy Share, are listed as artists. We doubt it.

(Note: the above improper remarks were made by one Sam Merwin, who dropped into the office and was prevailed upon to do a "guest review." I assume no responsibility for them. Poo to Merwin. Actually, **THE CHIGGER PATCH OF FANDOM** is delightful, crisp, witty, enjoyable, profound?—JB)

**ALMARK**, 4255 Maplewood Avenue, Montreal, Quebec, Canada. Editor: Al Rosen. Published bi-monthly; 15c per copy.

Contains an editorial, a brief rundown on prozines, and a story by Helen Louise Soucy. The editorial explains that "the policy of this magazine is very simple . . . we will never use any 'name' authors or any pros to write any of our articles or stories. Our aim is to develop and boost the efforts of the amateurs."

Commendable, and a fair start.

**SCIENCE-FICTION ADVERTISER**, 1745 Kenneth Road, Glendale 1, California. Editor: Roy A. Squires. Published bi-monthly; 20c per copy.

The leader in swapzines, containing advs. galore . . . also invariably shows up with a lead article of good-to-better quality.

One of the musts.

**SPACE DIVERSION**, published under the auspices of the Liverpool S-F Society, 13A St. Vincent Street, Liverpool 3, England. Co-editors: Tom Owens and John Roles. Published (approx.) bi-monthly; free to members, 6 pence to others, post free; U. S. A., 15c for two issues or in exchange for other 'zines.

This one has the spark . . . is notable for its variety, its neatness, its literacy . . . is one to keep your eye on.

In two issues, yet.

[Turn page]

## A HIGH SCHOOL DIPLOMA the EASY WAYNE WAY

• The quick, low-cost WAYNE way to a High School education. No classes; pleasant, spare-time home training; college preparatory; standard texts; credit for past schooling. If you have finished 8th grade and are over 17 years of age, write for free catalog.

### WAYNE SCHOOL

2827 SHEFFIELD AVENUE  
Catalog HAN-3, CHICAGO 14, ILL.



## SEND FOR THIS FREE!

Make money. Know how to break and train horses. Write today for this book FREE, together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ) Do it today—now.

**BEERY SCHOOL OF HORSEMANSHIP**  
Dept. 822 Pleasant Hill, Ohio



## OWN a Business

If employed, start part time. Alert dealers can gross \$5 hourly profit on own service plus \$3 on EACH serviceman. Clean, revive, moothproof rugs and upholstery on location. No shop needed. Services nationally advertised. Repeat customers. Easy to learn. Quickly established. Easy terms. Send today for FREE booklet. No obligation.

Buraclean Co., 3-602 Buraclean Bldg., Deerfield, ILL.

## Advertising BOOK MATCHES

### BIG SPOT CASH PROFITS . . . REPEATS

World's Largest Direct-Selling Book Match Manufacturer offers you big opportunity in profitable year-round business. Make money with MATCHCORP 20, 30, 40 and 240-light book matches. Low prices for high quality. Repeats. Full or part time: men, women. NOTHING TO BUY. Complete selling information and sample order-selling sales kit furnished. Get started right away—WRITE TODAY!

### MATCH CORPORATION OF AMERICA

3433-43 W. 48th Place, Dept. DA-1, Chicago 32, ILL.



## OLD LEG SORES

Easy to use Vaseline applications may heal many old leg sores by relieving venous congestion if caused by varicose veins, leg swelling or injuries. Send today for book and trial plan.

**T. G. VISCOSE COMPANY**  
140 N. Dearborn St. Chicago 2, ILL.

## LAW . . .

**STUDY AT HOME** Legally trained men win higher positions and bigger success in business and public life. Greater opportunities now than ever before.

**More Ability: More Prestige: More Money** We guide you step by step. You can train at home during spare time. Degree of LL.B. We furnish all text material, including 14-volume Law Library. Low cost, easy terms. Get our valuable 60-page "Law Training for Leaders" and "Evidence" books FREE. Send NOW.

**LASALLE EXTENSION UNIVERSITY**, 417 South Dearborn Street  
A Correspondence Institution Dept. 23291, Chicago 5, ILL.



JUST OUT!



## YOUR PROPHECY for 1953

An All-Year Horoscope Guide

ONLY 25c AT ALL STANDS

## High School Course

at Home Many Finish in 2 Years

Go as rapidly as your time and abilities permit. Course equivalent to resident school work — prepares for college entrance exams. Standard H. S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

AMERICAN SCHOOL, Dept. H-258, Drexel at 58th, Chicago 37

**EAR  
ACHE?**

**DENT'S**

**EAR WAX DROPS** for fast temporary relief of accumulated wax condition

**TOOTHACHE?** ask your druggist for DENT'S TOOTH GUM, TOOTH DROPS or POUTICE

AMAZING COMFORT — NO FITTING REQUIRED WITH PATENTED

## RUPTURE-EASER

Reg. in U.S. Pat. Off. (A Piper Brace Product) For MEN, WOMEN and CHILDREN



Pat. No.  
2606551

Right or Left  
Side \$3.95  
Double \$4.95

A strong, form fitting washable support. Back lacing adjustable. Bands up in front. Adjustable leg strap. Soft, flat groin pad. No steel or leather bands. Unexcelled for comfort. Also used as pad after operation support. Mail orders give measure around the lowest part of the abdomen and state right or left side or double. We Prepay Postage Except on C.O.D.'s.

Over 400,000 Satisfied Users! 10 Day Trial Offer

Money-back guarantee if you don't get blessed relief!

Delay may be serious — ORDER TODAY!

**PIPER BRACE CO.**

811 Wyandotte Dept. TF-23 Kansas City 6, Mo.

When You Visit Your Favorite  
Newsstand, Look for the Slogan

**A THRILLING  
PUBLICATION**

ON THE COVERS OF THE  
MAGAZINES YOU BUY!

**FOOVIEW**, "Fandom's Trailing Monthly," 878 Oak Street, Winnetka, Illinois. Editor: Barclay Johnson. Published monthly.

Five pages of gags, some of which are funny. And how did you get Sam Mines' photograph for the "Fliz Keeper?"

Didn't 'foo' stop being a howler back around '40?

**VEGA**, 119 S. Front Street, Marquette, Michigan. Editor: Joel Nydahl. Published monthly; 10c per copy.

Stories, features, an article . . . neatly hectorographed.

Needs stories, artwork, poetry.

**SF**, 9612 Second Avenue, Silver Spring, Maryland. Editor: John L. Magnus, Jr.; 15c per copy.

Has a certain zip to it . . . articles and features.

Good mimeo job, and an unusually attractive cover . . . let's see more of this technique. Did you airbrush each copy separately? Ye Gods!

Published by the Hopeful Young People's Extra-Radical Society for the Promotion of Amiable Conditions Everywhere . . . otherwise known as **HYPERSPACE**.

Yuk.

And who in hell makes \$100,000?

**MOTE**, Box 634, Norfolk, Nebraska. Editor: Robert Peatrowsky. Published bi-monthly; 5c per copy.

Two issues . . . numbers 1 and 2. Hectographed. Stories and articles, etc.

**BREVIZINE**, 5018 West 18th Street, Cicero 50, Illinois. Editor: Warren A. Freiberg. Published monthly; 10c per copy.

Fanlom's pintsizine . . . stories, departments, letters.

The contents page lists "stories & articles by L. Sprague de Camp . . . Hugo Gernsback." Sprague's contribution is a letter . . . Gernsback's, two quotes from twenty-year-old editors.

Needs material . . . and let's get categorical: all fanzines are in the market, as it were, for material. So if you're just a casual stf reader, and have wandered into this column by accident, and if you've always had a secret desire to write or illustrate stf . . . get with it. Unload.

**VANATIONS**, 13906 101A Avenue, Edmonton, Alberta, Canada. Editor: Norman G. Browne. Can't find the publication schedule and price listed.

Not sure but that I gave this one the treatment last month . . . anyhow, go for broke:

It's a comer. Stories, articles, features, the usual stuff. Effective cover.

That's it for this trip . . . (Duck! . . . Merwin just came in again!) . . . so I'll see you around next month. Lots more awaiting the ax.

—Jerome Bixby

**\$100.00 A WEEK in CASH**  
PAID DIRECT TO YOU



# FAMILY HOSPITAL PLAN

## SAVE MONEY!

There's a big advantage to buying this policy by mail. This method of selling is less costly for us—and that's another reason why we are able to offer so much protection for so little money.

Policy Pays for a Day, a Week,  
a Month, a Year—just as long as  
necessary for you to be hospitalized!

## JUST LOOK

### The Large Benefit This Low Cost Policy Provides!

The Service Life Family Hospital Plan covers you and your family for about everything—for every accident, and for all common and rare diseases after the policy has been in force 30 days or more. Very serious disease such as cancer, tuberculosis, heart disease, diseases involving female organs, sickness resulting in a surgical operation, hernia, lumbago and sacroiliac conditions originating after the policy is in force six months are all covered . . . Hospitalization caused by attempted suicide, use of intoxicants or narcotics, insanity, and venereal disease is naturally excluded.

The money is all yours—for any purpose you want to use it. There are no hidden meanings or big words in the policy. We urge you and every family and also individuals to send for this policy on our 10 day free trial offer—and be convinced that no other hospital plan offers you so much for your \$1.00 a month!

## TWO SPECIAL FEATURES

### MATERNITY

**Benefits At Small Extra Cost**  
Women who will some day have babies will want to take advantage of a special low cost maternity rider. Pays \$50.00 for childbirth confinement either in the hospital or at home, after policy has been in force 10 months. Double the amount on twins.

### POLIO

**Benefits At No Extra Cost**  
In lieu of other regular benefits policy pays these benefits if polio strikes—For Hospital Bills up to . . . \$500.00  
For Doctor's Bills while in the hospital, up to \$500.00  
For Orthopedic Appliances, up to . . . \$500.00  
TOTAL OF \$1,500.00

# 3¢ A DAY IS ALL YOU PAY

for this outstanding new Family Protection

Wonderful news! This new policy covers everyone from infancy to age 70! When sickness or accident sends you or a member of your family to the hospital—this policy PAYS \$100.00 PER WEEK for a day, a month, even a year . . . or just as long as you stay in the hospital. What a wonderful feeling to know your savings are protected and you won't have to go into debt. The money is paid DIRECT TO YOU to spend as you wish. This remarkable new Family Hospital Protection costs only 3¢ a day for each adult 18 to 59 years of age, and for age 60 to 70 only 4½¢ a day. This policy even covers children up to 18 years of age with cash benefits of \$50.00 a week while in the hospital—yet the cost is only 1½¢ a day for each child! Benefits paid while confined to any recognized hospital, except government hospitals, rest homes and clinics, spas or sanitariums. Pick your own doctor. Naturally this wonderful policy is issued only to individuals and families now in good health; otherwise the cost would be sky high. But once protected, you are covered for almost every sickness or accident. Persons covered may return as often as necessary to the hospital within the year.

### This is What \$100.00 a Week Can Mean to You When in the Hospital for Sickness or Accident

Money melts away fast when you or a member of your family has to go to the hospital. You have to pay costly hospital board and room . . . doctor's bills and maybe the surgeon's bill too . . . necessary medicines, operating room fees—a thousand and one things you don't count on. What a Godsend this READY CASH BENEFIT WILL BE TO YOU. Here's cash to go a long way toward paying heavy hospital expenses—and the money left over can help pay you for time lost from your job or business. Remember—all cash benefits are paid directly to you.

**REMEMBER—\$100.00 A WEEK CASH BENEFIT IS ACTUALLY \$14.25 PER DAY!**

### Examine This Policy Without Cost or Obligation—Read It—Talk It Over—Then Decide

## 10 DAYS FREE EXAMINATION

You are invited to inspect this new kind of Family Hospital Plan. We will send the actual policy to you for ten days at no cost or obligation. Talk it over with your banker, doctor, lawyer or spiritual adviser. Then make up your mind. This policy backed by the full resources of the nationally known Service Life Insurance Company of Omaha, Nebraska—organized under the laws of Nebraska and with policyholders in every state. SEND NO MONEY—just your name and address! No obligation, of course!

## FREE INSPECTION... MAIL COUPON

The Actual Policy Will Come to You at Once Without Cost or Obligation

The Service Life Insurance Company  
Hospital Department M-17 Omaha 2, Nebraska  
Please rush the new Family Hospital Protection Plan Policy to me on 10 days Free Inspection. I understand that I am under no obligation.

Name.....

Address.....

City or Town..... State.....

## SERVICE LIFE INSURANCE COMPANY

Assets of \$12,700,000 as of January 1, 1952  
Hospital Department M-17, Omaha 2, Nebraska



Reducing Specialist Says:  
**LOSE WEIGHT**

Where  
It  
Shows  
Most

**REDUCE**

MOST ANY  
PART OF  
THE  
BODY WITH.



UNDERWRITERS  
LABORATORY  
APPROVED

# Spot Reducer

Relaxing • Soothing  
Penetrating Massage

**ELECTRIC  
Spot  
Reducer**



**PLUG IN—  
GRASP  
HANDLE  
AND  
APPLY**

Take pounds off—keep slim and trim with Spot Reducer! Remarkable new invention which uses one of the most effective reducing methods employed by masseurs and turkish baths—MASSAGE!

**L**IKE a magic wand, the "Spot Reducer" obeys your every wish. Most any part of your body where it is loose and flabby, wherever you have extra weight and inches, the "Spot Reducer" can aid you in acquiring a youthful, slender and graceful figure. The beauty of this scientifically designed Reducer is that the method is so simple and easy, the results quick, sure and harmless. No exercise or strict diets. No steambaths, drugs or laxatives.

With the SPOT REDUCER you can now enjoy the benefits of RELAXING, SOOTHING massage in the privacy of your own home! Simple to use—just plug in, grasp handle and apply over most any part of the body—stomach, hips, chest, neck, thighs, arms, buttocks, etc. The relaxing, soothing massage breaks down FATTY TISSUES, tones the muscles and flesh, and the increased awakened blood circulation carries away waste fat—helps you regain and keep a firmer and more GRACEFUL FIGURE!

**TAKE OFF EXCESS WEIGHT!**

**Don't Stay FAT—You Can Lose  
POUNDS and INCHES SAFELY**

Without Risking  
HEALTH

## Your Own Private Masseur at Home

When you use the Spot Reducer, it's almost like having your own private masseur at home. It's fun reducing this way! It not only helps you reduce and keep slim—but also aids in the relief of those types of aches and pains—and tired nerves that can be helped by massage! The Spot Reducer is handsomely made of light weight aluminum and rubber and truly a beautiful invention you will be thankful you own. AC 110 volts. Underwriter laboratory approved.

**TRY THE SPOT REDUCER 10 DAYS FREE IN YOUR OWN HOME!**

Mail this coupon with only \$1 for your Spot Reducer an approval. Pay postman \$3.95 plus delivery—or send \$3.95 (full price) and we ship postage prepaid. Use it for ten days in your own home. Then if not delighted return Spot Reducer for full purchase price refund. Don't delay! You have nothing to lose—except ugly, embarrassing, undesirable pounds of FAT. MAIL COUPON now!

**ALSO USE IT FOR ACES AND PAINS**



**CAN'T SLEEP**

Relax with electric Spot Reducer. See how soothing its gentle massage can be. Help you sleep when massage can be of benefit.



**MUSCULAR ACES:**

A handy helper for transient relief of discomforts that can be aided by gentle, relaxing massage.

**LOSE WEIGHT  
OR NO CHARGE**

**USED BY EXPERTS**

Thousands have lost weight this way—in hips, abdomen, legs, arms, necks, buttocks, etc. The same method used by stage, screen and radio personalities and in leading reducing salons. The Spot Reducer can be used in your spare time, in the privacy of your own room.

**ORDER IT TODAY**

**SENT ON APPROVAL—MAIL COUPON NOW!**

**SPOT REDUCER CO., Dept. B-339**

**318 Market St., Newark, New Jersey**

Please send me the Spot Reducer for 10 days trial period. I enclose \$1. Upon arrival I will pay postman only \$3.95 plus postage and handling. If not delighted I may return SPOT REDUCER within 10 days for prompt refund of full purchase price.

☐ I enclose \$3.95. Send DeLuxe Model.

Name

Address

City  State

☐ SAVE POSTAGE — check here if you enclose \$3.95 with coupon. We pay all postage and handling charges. Same money back guarantee applies. ☐ I enclose \$13.95. Send DeLuxe Model.

**LOSE WEIGHT OR NO CHARGE**

MAIL THIS 10-DAY FREE TRIAL COUPON NOW!